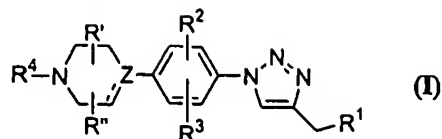


We claim:

1. A compound of formula (I)



Where R^1 is isoindole-1,3-dione, azido, NHR^5 where R^5 represents

(a) Hydrogen,

(b) $\begin{array}{c} -C-R^6 \\ || \\ Q \end{array}$

Where Q represents 'O' or 'S'

R^6 represents

(i) Hydrogen,

Optionally substituted groups selected from,

(ii) Alkyl,

(iii) Cycloalkyl,

(iv) Alkoxy,

(v) Cycloalkoxy,

(vi) Alkenyl,

(vii) Alkenyloxy,

(viii) Aryl,

(ix) Aryloxy,

(xii) Heteroaryl,

(xiii) Heterocyclyl,

(xii) Heteroaryloxy,

(xiii) $-NH-R^7$, where R^7 represents hydrogen, optionally substituted groups selected from alkyl, cycloalkyl, hydroxyalkyl, alkoxy, cycloalkoxy, alkenyl, aryl, aralkyl, heteroaryl, heteroaralkyl,

$\begin{array}{c} -C-R^8 \\ || \\ Q \end{array}$

wherein R^8 is optionally substituted group selected from alkyl, alkoxy, cycloalkyl, alkenyl, alkenyloxy, aryl, aryloxy, aralkyl, aralkoxy, heteroaryl, heteroaryloxy, and Q represents oxygen or sulfur;

(xiv) $-N-[alkyl]_2$,

(xv) $-N(R^c R^d)$, wherein R^c and R^d together form an optionally substituted 5 or 6 member heterocycle ring containing nitrogen and optionally having one or two additional hetero atoms selected from O, S or N;

(xvi) $-SR^8$, wherein R^8 is as defined above,

(xv) $-SO_2$ -alkyl;

R^2 and R^3 at each occurrence are the same or different and are

(ix) Hydrogen,

(x) Halogen,

(xi) Cyano,

(xii) Nitro,

(xiii) Amino

Optionally substituted groups selected from

(xiv) Alkyl,

(xv) Haloalkyl,

(xvi) OR^a where R^a represents hydrogen or optionally substituted alkyl group;

(xvii) $-NR^b$ where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl, carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

'Z' represents N, C or CH;

'.....' represents a bond or nobond;

R^4 represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylamino, alkylaminoalkyl, acyl, haloacyl, alkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, alkenyloxy, aryl, aryloxy, arylcarbonyl, aralkyl, aralkylcarbonyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkylcarbonyl, heterocyclylalkyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, alkenylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, aralkoxyalkyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfonyl, alkylsulfanyl, alkylsulfinyl, arylsulfonyl, arylsulfanyl, arylsulfinyl, *tert*-butoxycarbonyl, (BOC), heteroarylsulfonyl

R' and R'' independently represent hydrogen, oxo ($=O$), thioxo ($=S$), amino, cyano, halogen, alkyl, alkoxy or haloalkyl;

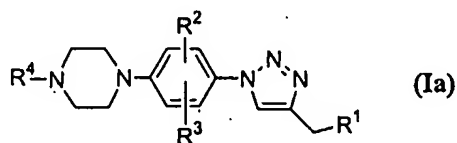
Substituents on R^4 , R^6 , R^7 , R^8 , independently selected from halogen, nitro, cyano, amino, hydroxy, cyano, oxo ($=O$), thioxo ($=S$), $=N-CN$, $=N-OR^x$, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (*tert*-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSCl), *tert*-butoxycarbonyl (BOC), *N*-hydroxyformamide, carboxylic acids or its derivatives, phosphoric acid or its derivatives. Further optional substituents on the optionally substituted groups defined above are selected from halogen, hydroxyl, cyano, amino, nitro, oxo ($=O$), thioxo ($=S$), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives.

Substituents on R^2 and R^3 independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, $=O$, $=S$, cyano group, or carboxylic acid or its derivatives.

their pharmaceutically acceptable salts their stereoisomers thereof, their prodrugs, their rotamers and their pharmaceutical compositions containing them.

Wherever substitutions are possible on the groups represented by R^2 , R^3 , R^4 , R^5 , R^6 , R^7 and R^8 , they may take place 1 to 5 times, which may be same or different;

2. A compound as claimed in claim 1, wherein formula (I) as described by formula (Ia) below:



Where R^1 represents



Where Q represents 'S'

R^6 represents

(i) Hydrogen,

Optionally substituted groups selected from,

(ii) Alkyl,

(iii) Cycloalkyl,

(iv) Alkoxy,

(v) Cycloalkoxy,

(vi) Alkenyl,

(vii) Alkenyloxy,

R^2 and R^3 at each occurrence are the same or different and are

(i) Hydrogen,

(ii) Halogen,

R^4 represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, haloalkyl, aminoalkyl, alkylamino, alkylaminoalkyl, acyl, haloacyl, aminocarbonyl, alkylcarbonyl, cycloalkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, aryl, aryloxy, arylcarbonyl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkylcarbonyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, heterocyclylalkylcarbonyl, *tert*-butoxycarbonyl (BOC), alkenylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfonyl, alkylsulfanyl, alkylsulfinyl, arylsulfonyl, arylsulfanyl, arylsulfinyl, heteroarylsulfonyl

Substituents on R^4 selected from halogen, nitro, cyano, amino, hydroxy, oxo (=O), =N-CN, =N-OR^x, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (*tert*-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSO), *tert*-butoxycarbonyl (BOC), N-hydroxyformamide, carboxylic acids or its derivatives. The optional substituents on these groups are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives, phosphoric acid or its derivatives;

The substitutions on the possible groups represented by R^4 , may take place 1 to 5 times, which may be same or different;

3. The compound of formula (Ia) as claimed in claim 2,

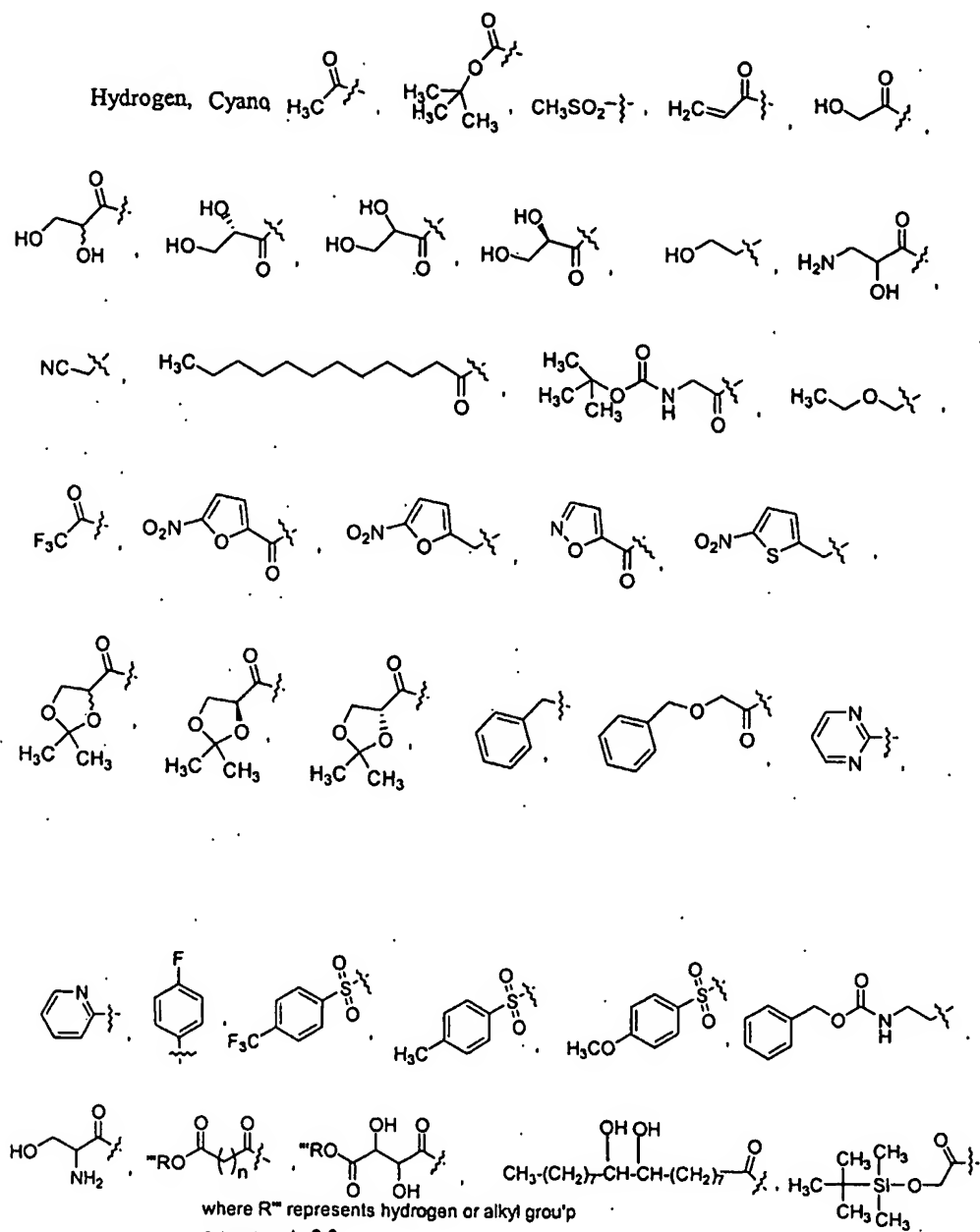
where R_1 represents



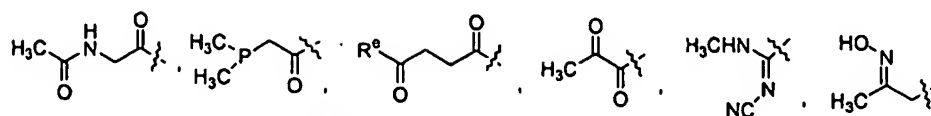
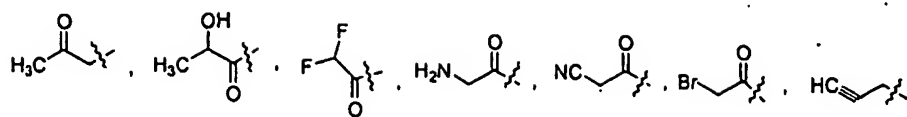
R^2 and R^3 , which may be same or different, independently represent hydrogen or halogen;

R^4 represents

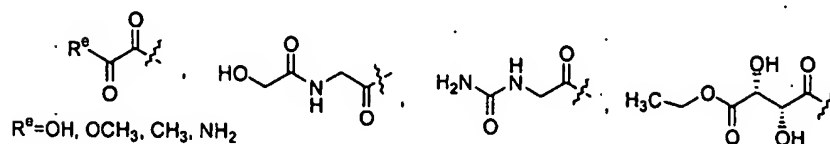
R^4 represents



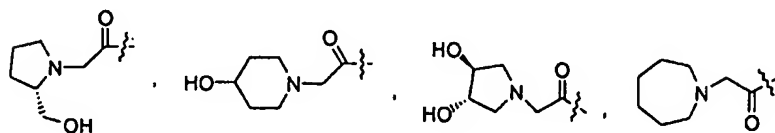
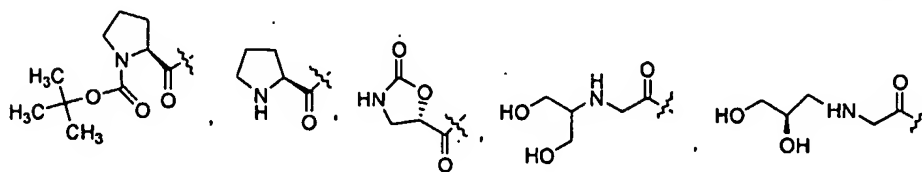
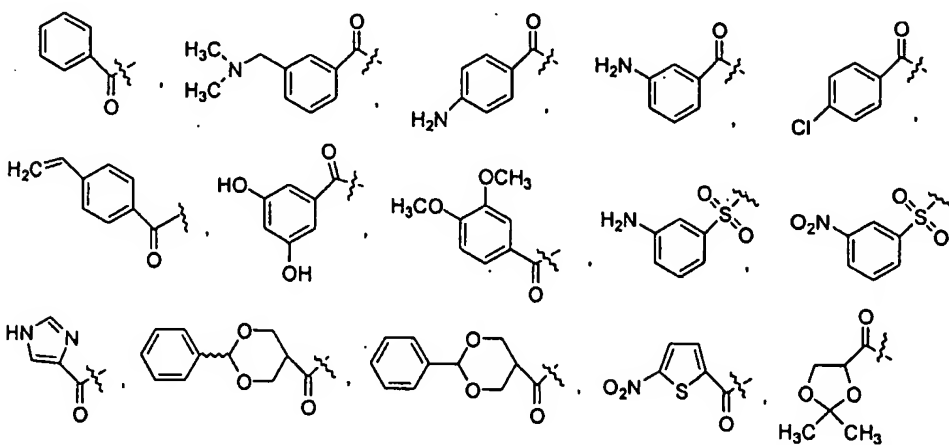
where R^m represents hydrogen or alkyl group
n represents 0-6;

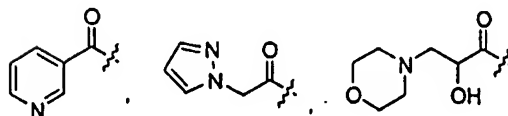
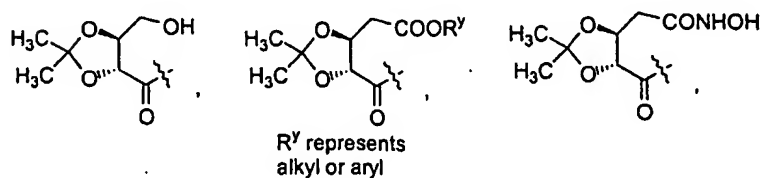
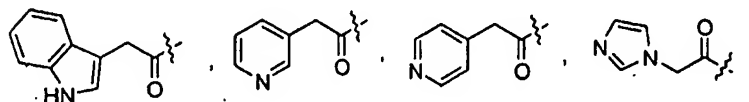
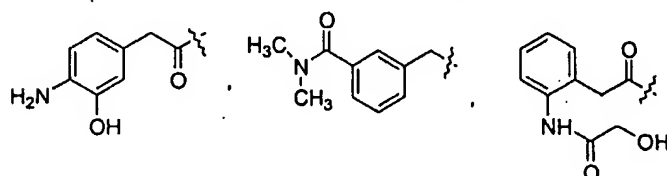
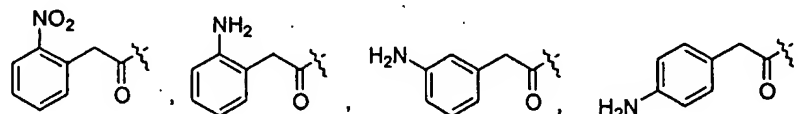
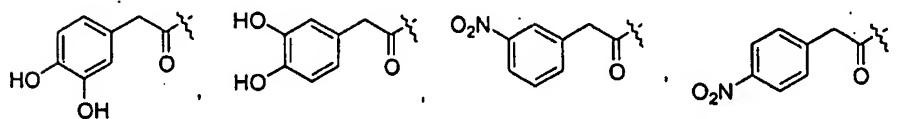
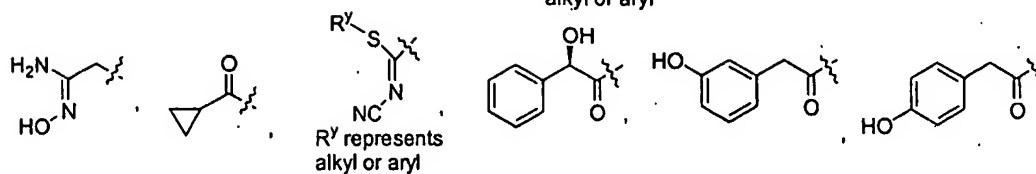
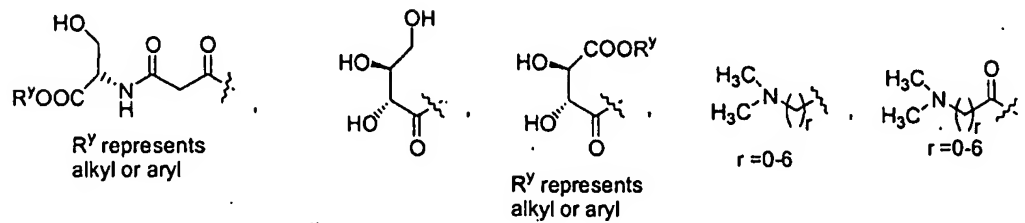
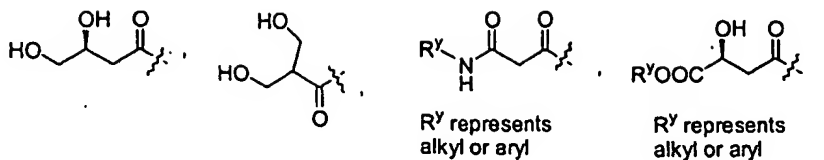


$\text{R}^e = \text{OH}, \text{OCH}_3, \text{CH}_3, \text{NH}_2$



$\text{R}^e = \text{OH}, \text{OCH}_3, \text{CH}_3, \text{NH}_2$





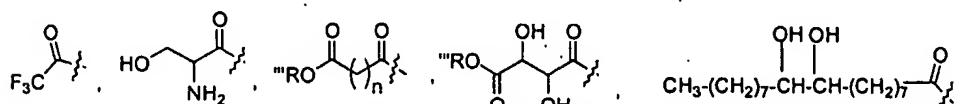
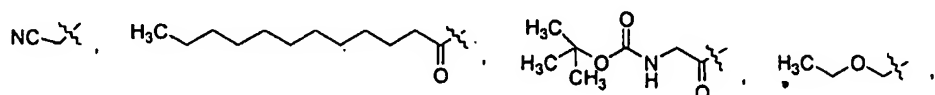
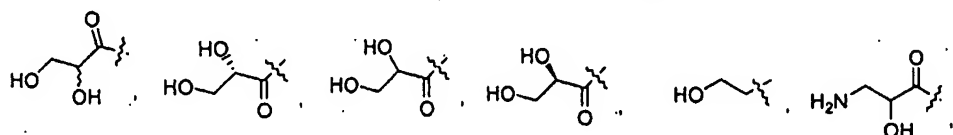
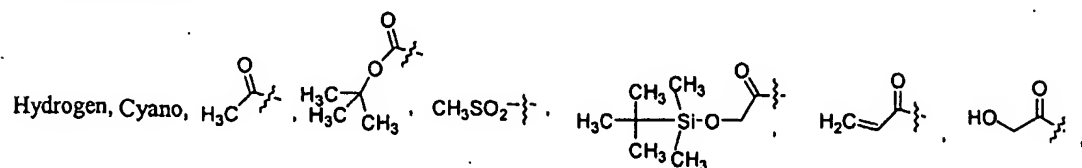
4. The compound of formula (Ia) as claimed in claim 2,

where R_1 represents

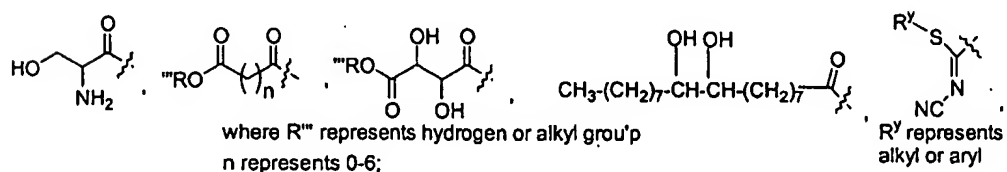


R^2 and R^3 , which may be same or different, independently represent hydrogen or halogen;

R^4 represents

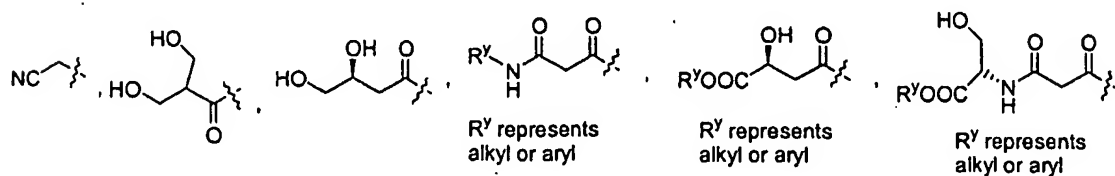


where R^m represents hydrogen or alkyl group
n represents 0-6;



where R^m represents hydrogen or alkyl group
n represents 0-6;

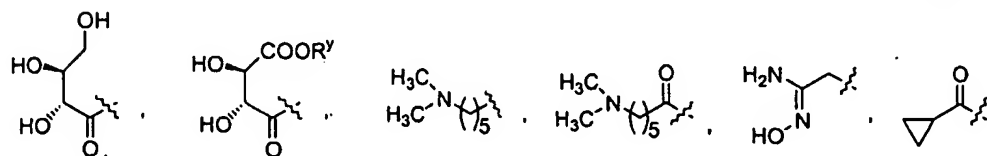
R^y represents
alkyl or aryl



R^y represents
alkyl or aryl

R^y represents
alkyl or aryl

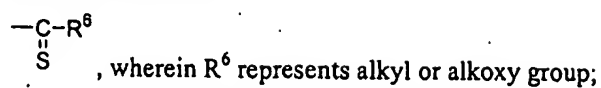
R^y represents
alkyl or aryl



R^y represents
alkyl or aryl

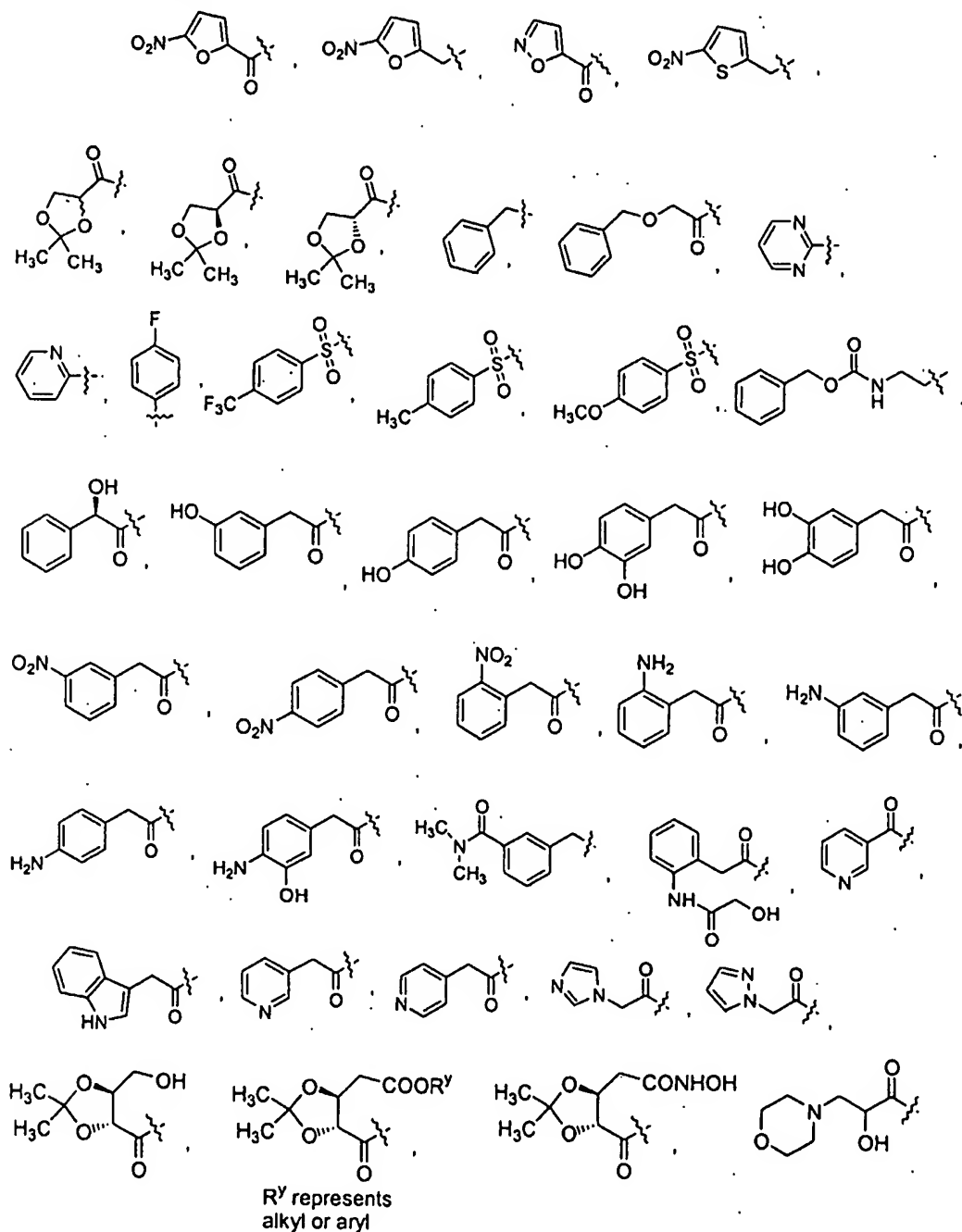
5. The compound of formula (Ia) as claimed in claim 2,

where R_1 represents

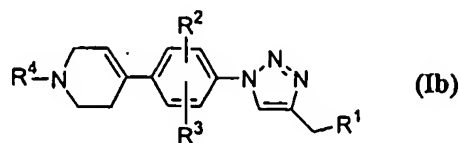


R^2 and R^3 , which may be same or different, independently represent hydrogen or halogen;

R^4 represents cyano,



6. A compound as claimed in claim 1, wherein formula (I) as described by formula (Ib) below:



Where R¹ represents



Where Q represents 'S'

R⁶ represents

(i) Hydrogen,

Optionally substituted groups selected from,

(ii) Alkyl,

(iii) Cycloalkyl,

(iv) Alkoxy,

(v) Cycloalkoxy,

(vi) Alkenyl,

(vii) Alkenyloxy,

R² and R³ at each occurrence are the same or different and are

(i) Hydrogen,

(ii) Halogen,

R⁴ represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, haloalkyl, aminoalkyl, alkylamino, alkylaminoalkyl, acyl, haloacyl, aminocarbonyl, alkylcarbonyl, cycloalkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, aryl, aryloxy, arylcarbonyl, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkylcarbonyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, heterocyclylalkylcarbonyl, *tert*-butoxycarbonyl (BOC), alkenylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfonyl, alkylsulfanyl, alkylsulfinyl, arylsulfonyl, arylsulfanyl, arylsulfinyl, heteroarylsulfonyl

Substituents on R⁴ selected from halogen, nitro, cyano, amino, hydroxy, oxo (=O), =N-CN, =N-OR^x, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl,

hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxy carbonyl, alkylsulfonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (*tert*-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSO), *tert*-butoxycarbonyl (BOC), N-hydroxyformamide, carboxylic acids or its derivatives. The optional substituents on these groups are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives, phosphoric acid or its derivatives;

The substitutions on the possible groups represented by R⁴, may take place 1 to 5 times, which may be same or different;

which is represented by compound of formula (Ia); their pharmaceutically acceptable salts their stereoisomers thereof, pharmaceutical compositions containing them

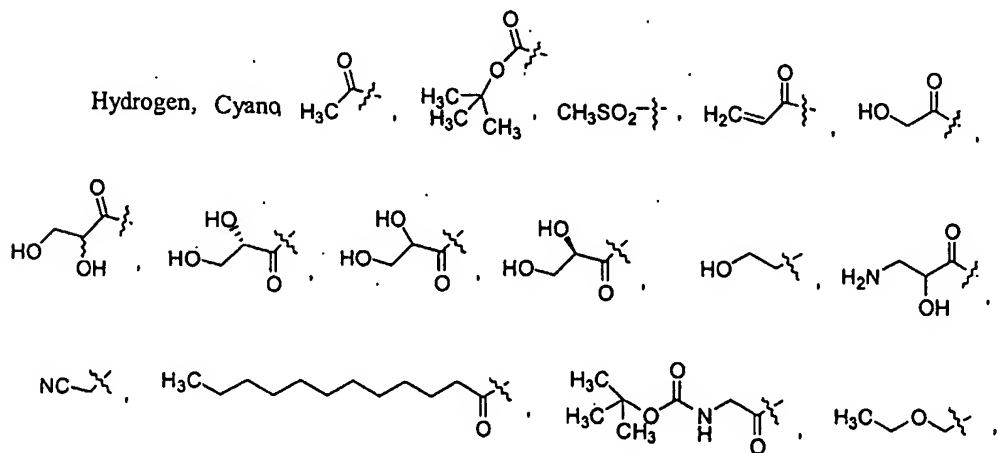
7. The compound of formula (Ib), as defined in claim 6,

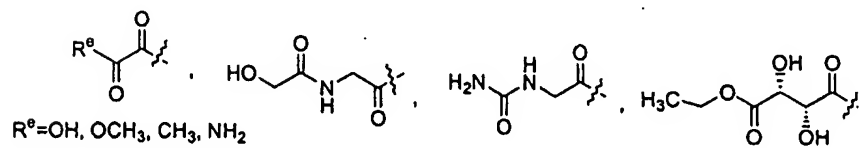
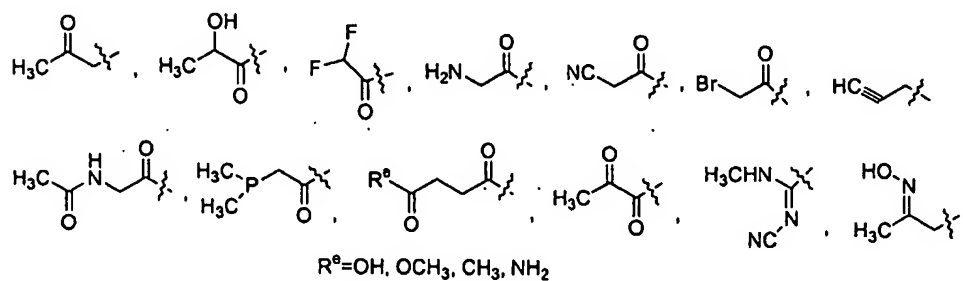
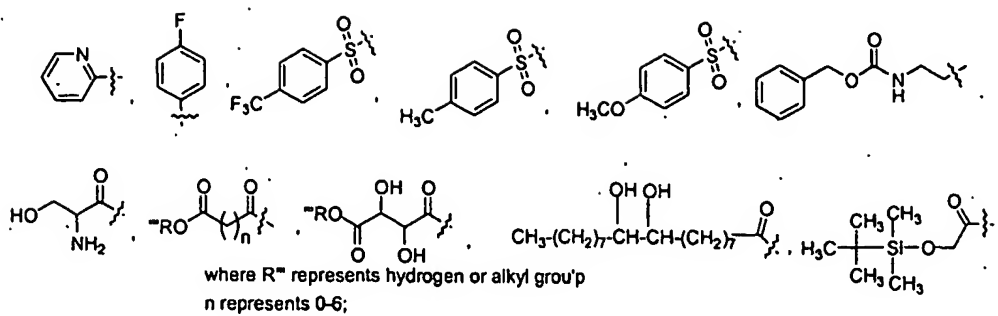
where R₁ represents

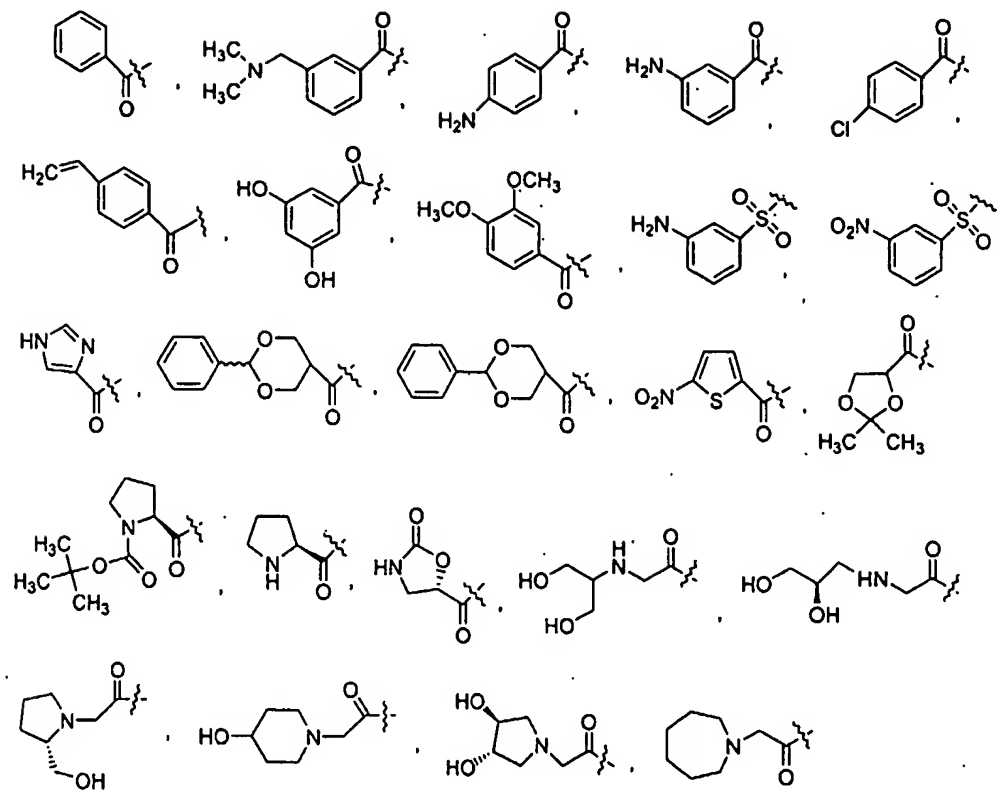
$\begin{array}{c} \text{---C---R}^6 \\ || \\ \text{S} \end{array}$, wherein R⁶ represents alkyl or alkoxy group;

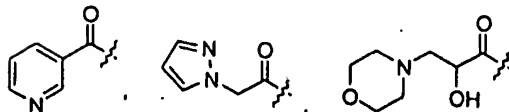
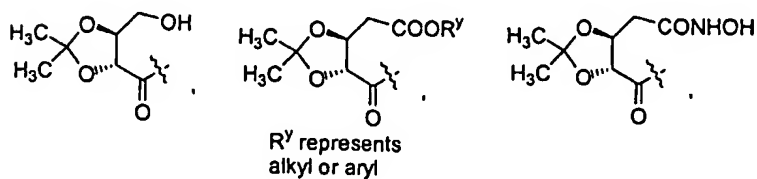
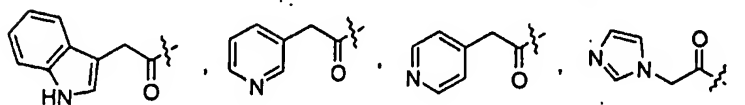
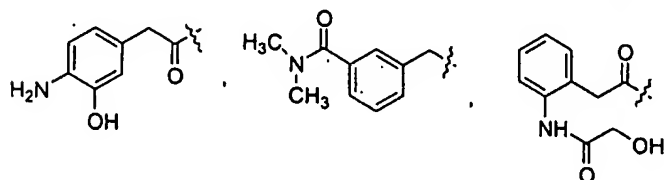
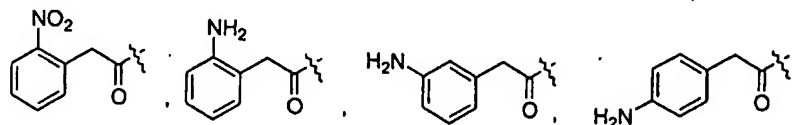
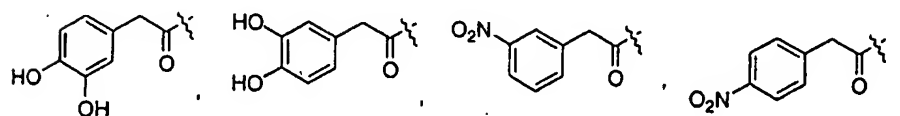
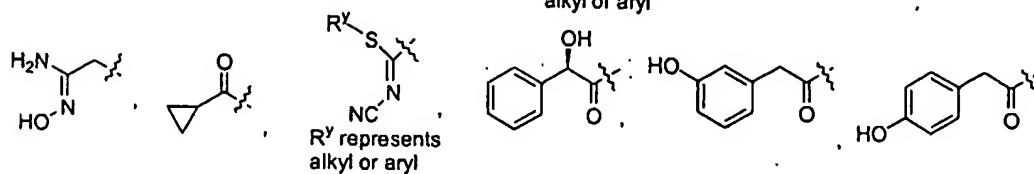
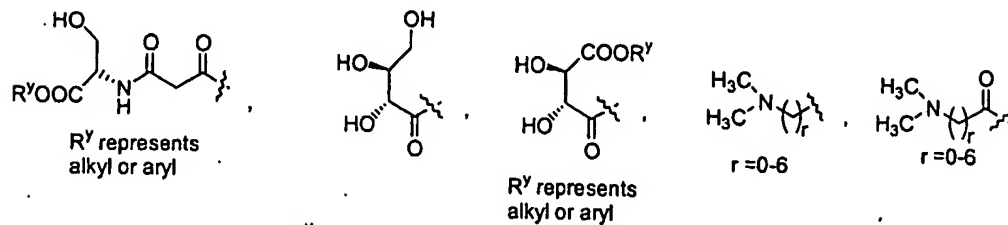
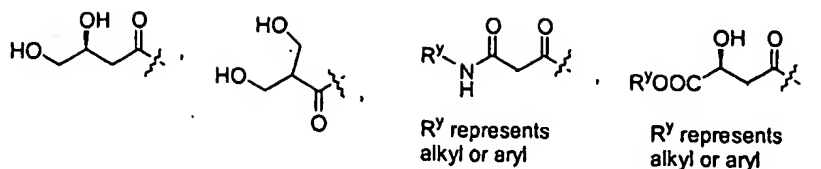
R² and R³, which may be same or different, independently represent hydrogen or halogen;

R⁴ represents









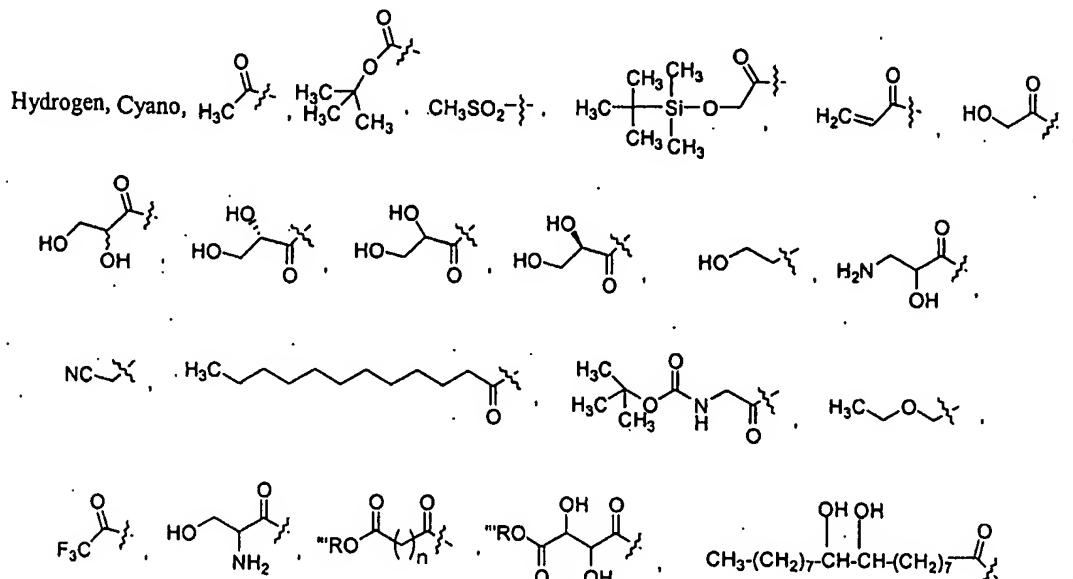
8. The compound of formula (Ib), as defined in claim 6,

where R_1 represents

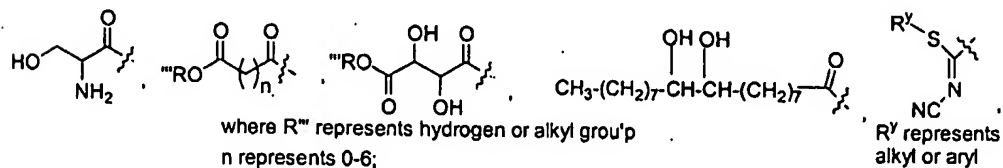


R^2 and R^3 , which may be same or different, independently represent hydrogen or halogen;

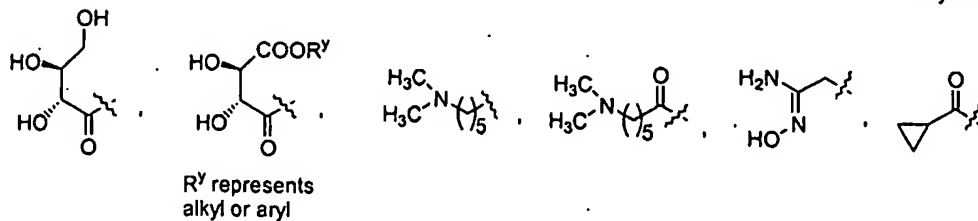
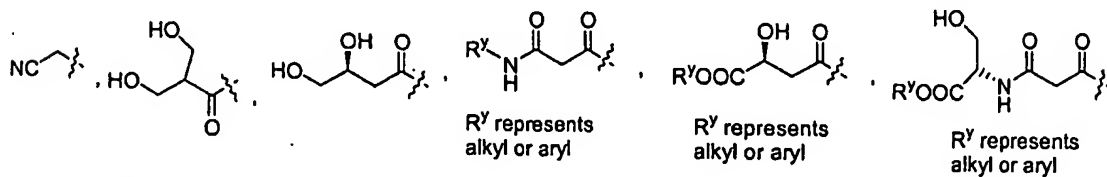
R^4 represents



where R^{m} represents hydrogen or alkyl group
n represents 0-6;

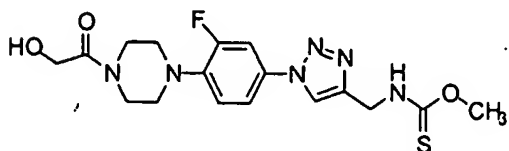
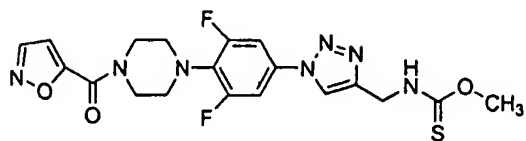
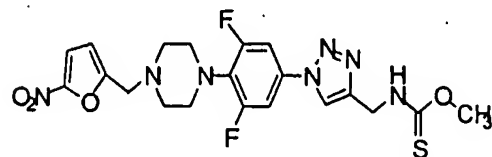
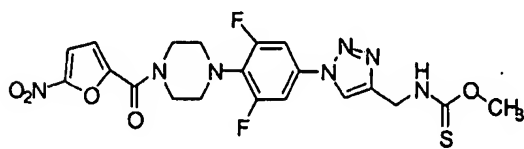
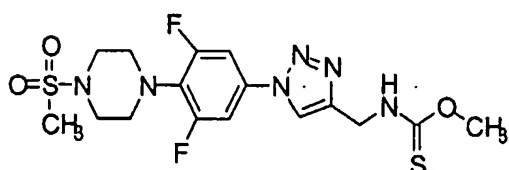
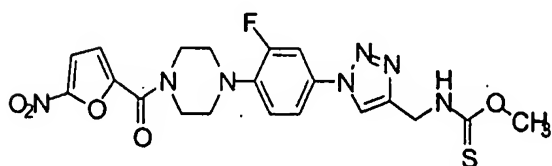
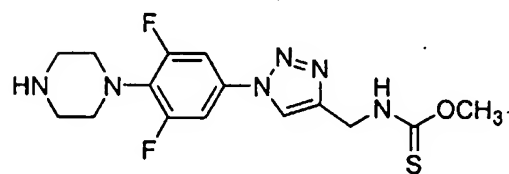
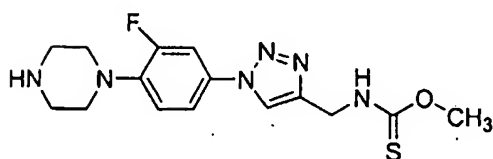
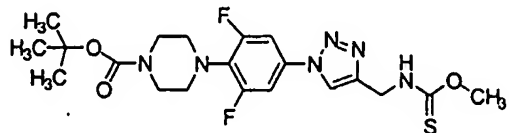
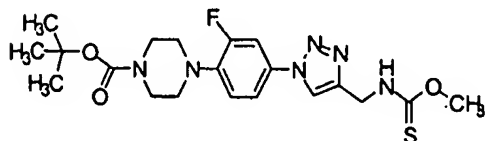
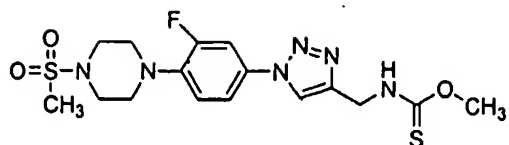
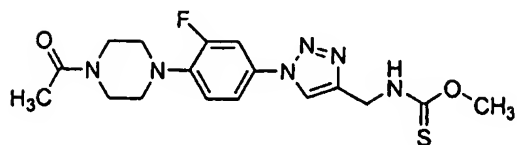


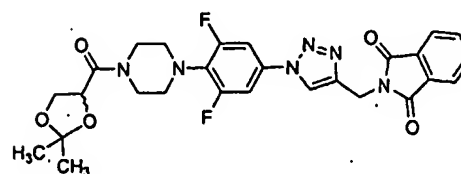
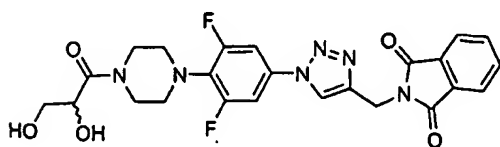
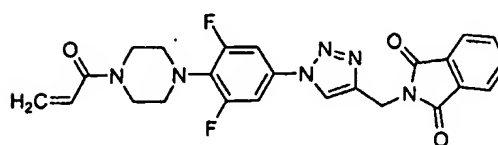
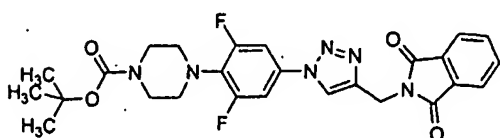
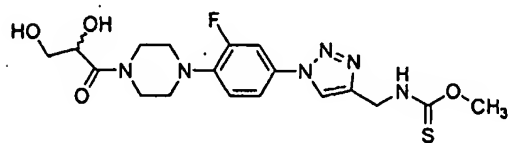
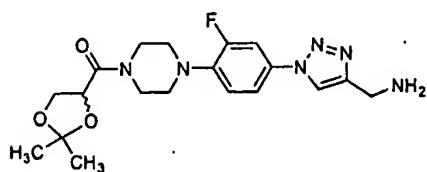
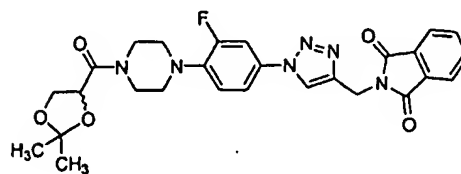
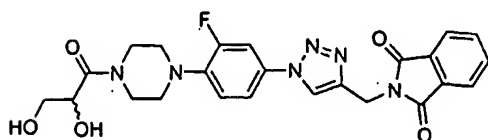
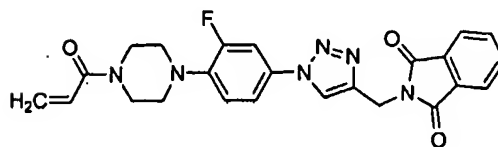
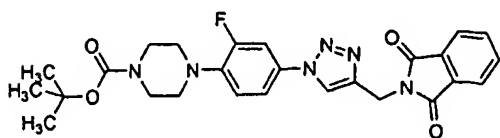
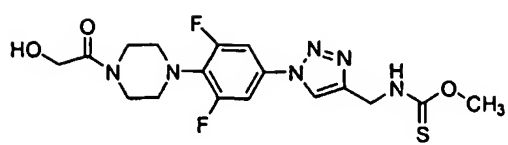
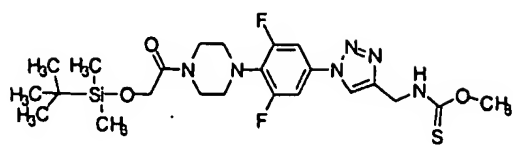
where R^{m} represents hydrogen or alkyl group
n represents 0-6;

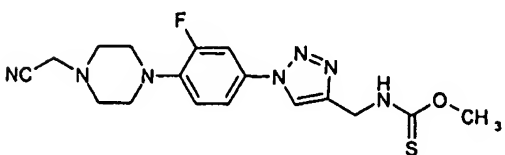
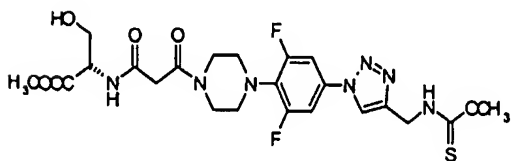
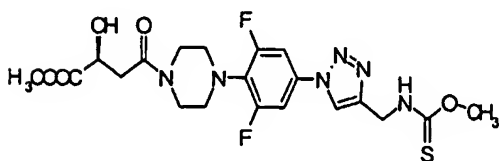
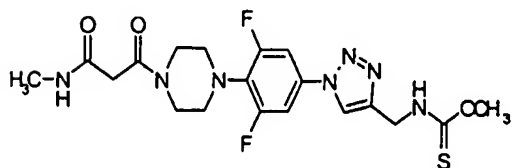
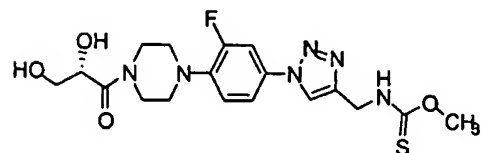
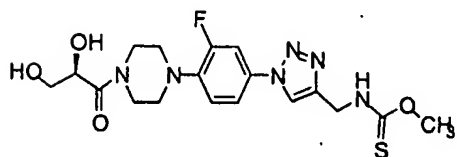
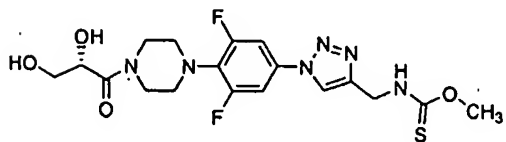
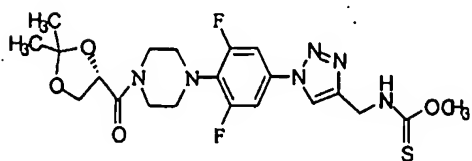
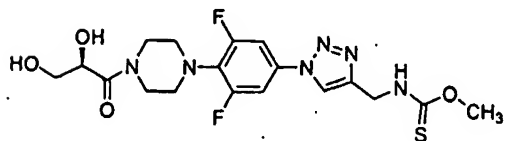
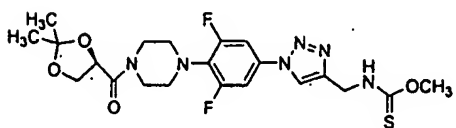
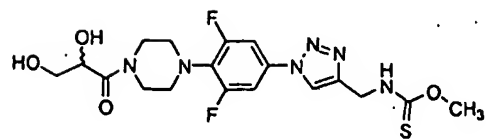
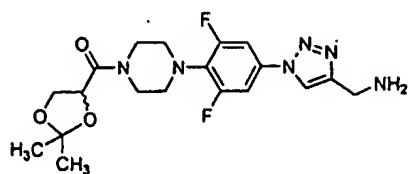


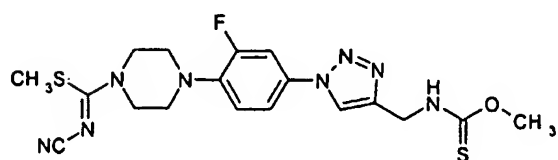
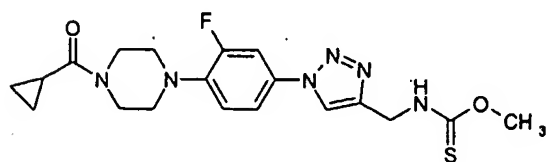
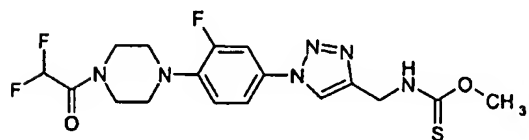
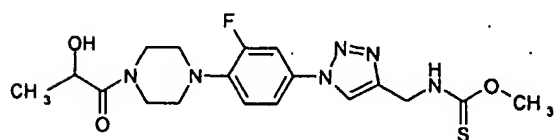
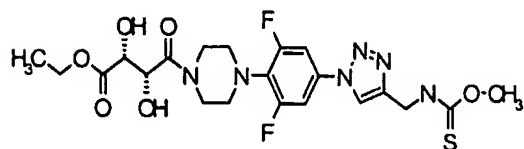
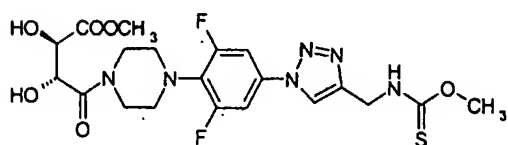
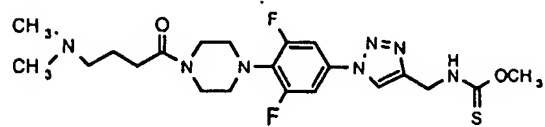
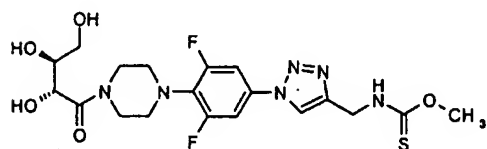
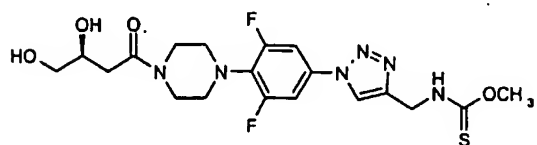
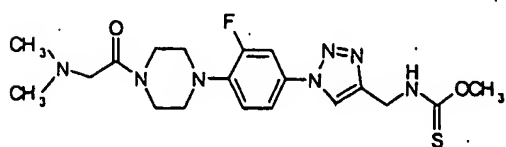
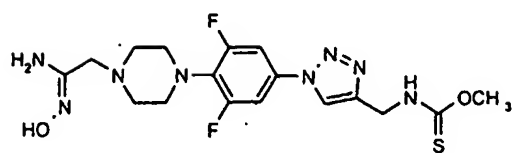
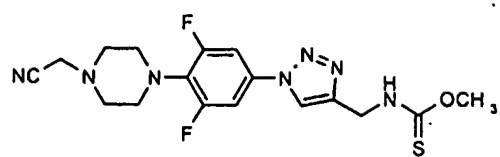
9. The compound of formula (Ib), as defined in claim 6,

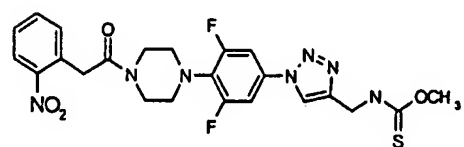
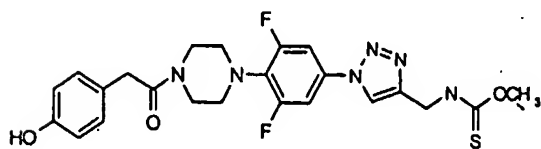
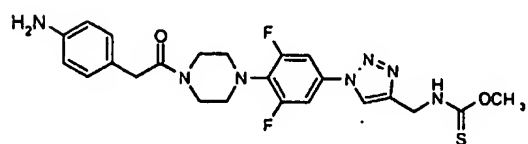
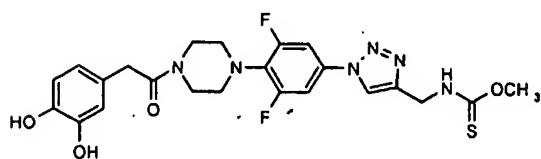
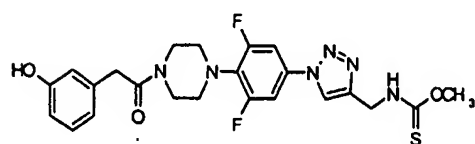
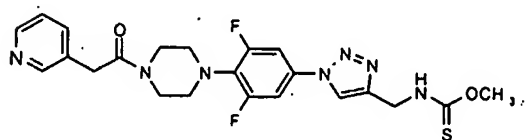
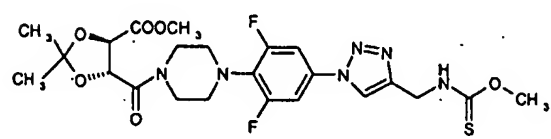
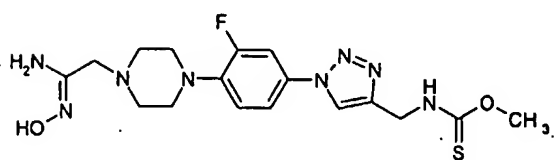
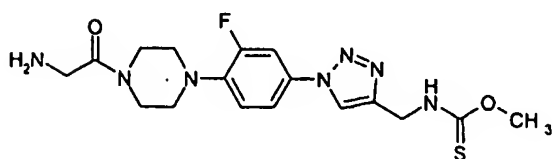
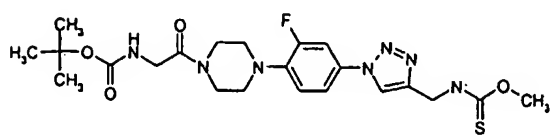
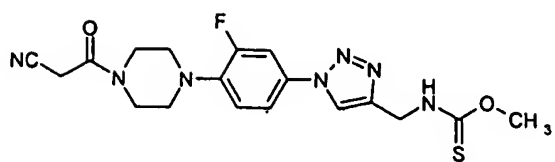
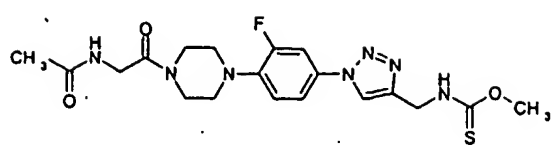
10. The compound as claimed in claim 1,

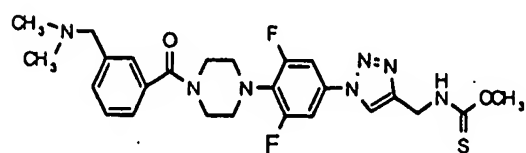
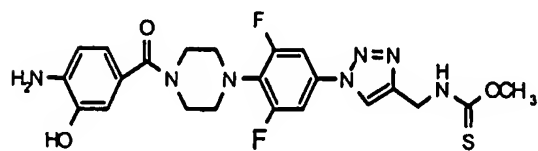
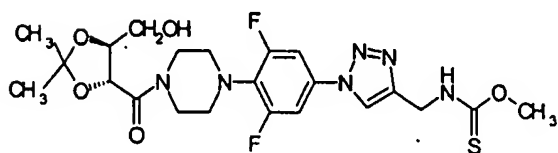
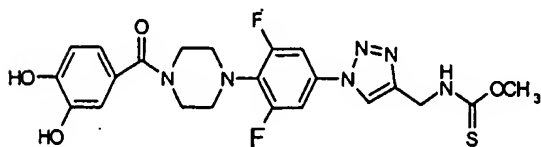
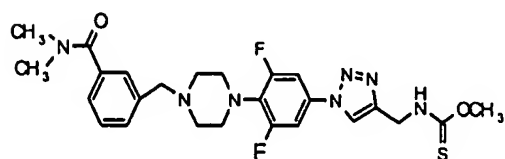
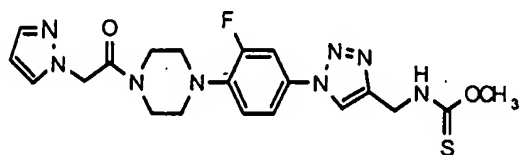
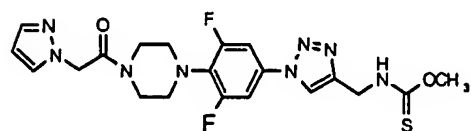
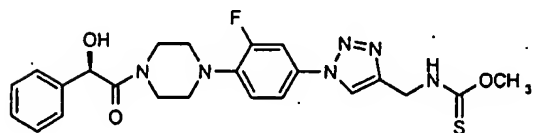
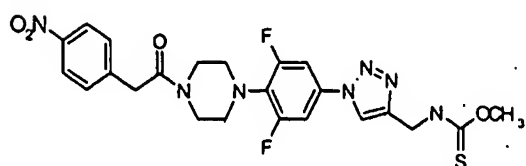
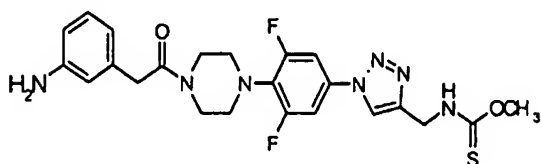
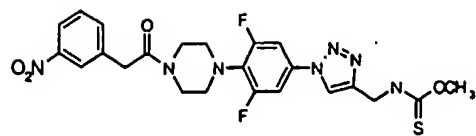
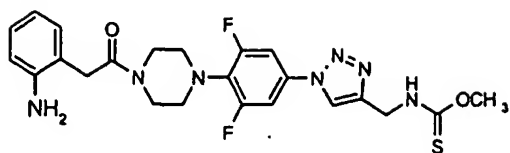


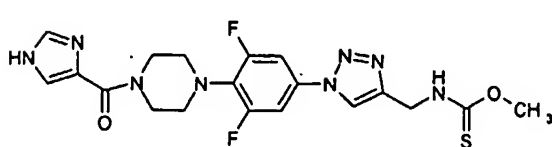
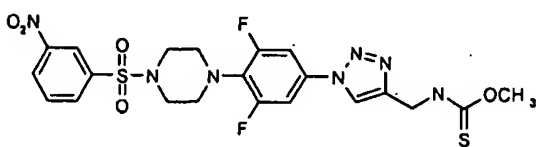
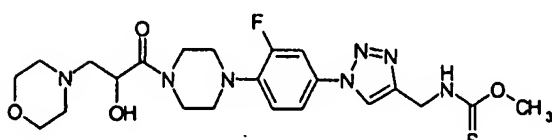
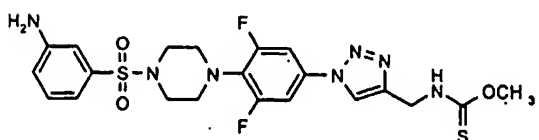
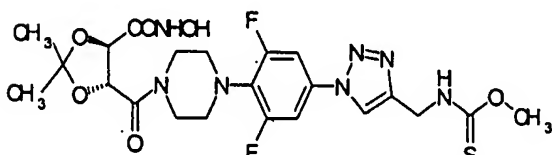
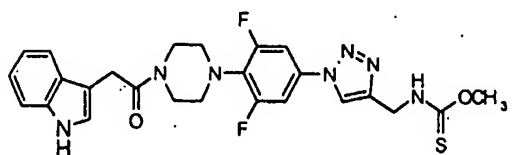
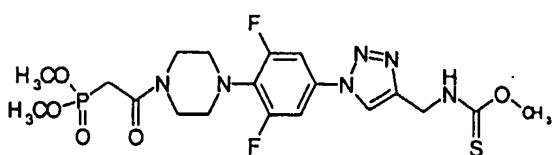
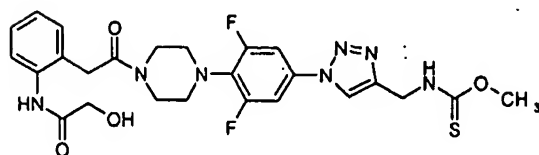
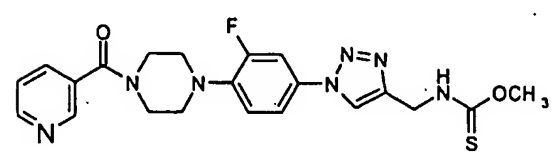
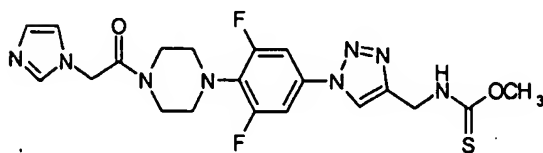
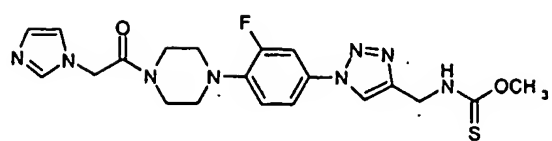
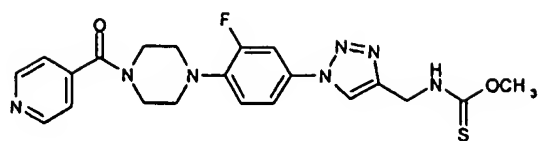


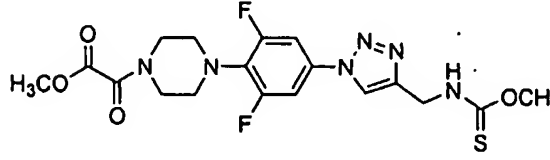
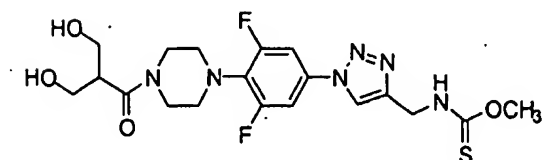
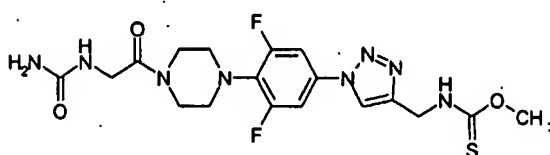
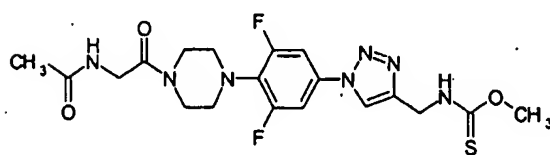
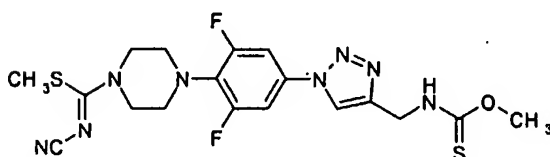
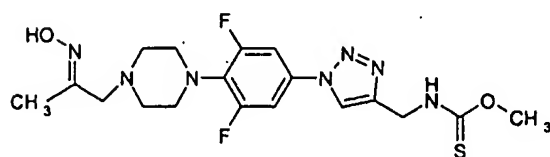
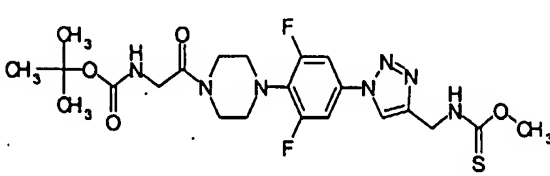
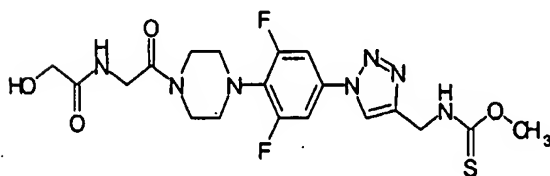
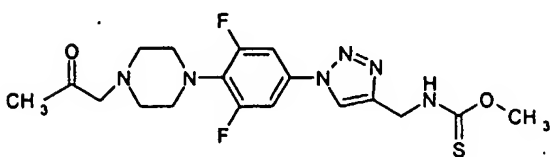
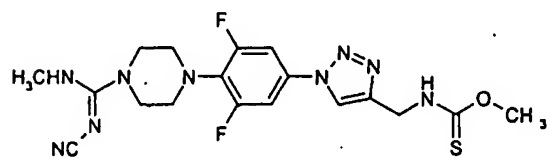
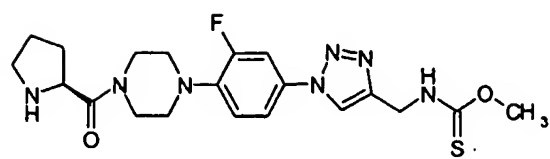
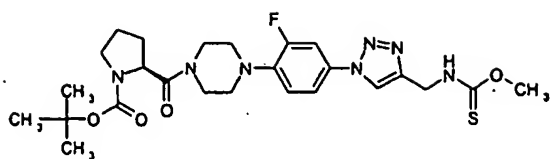


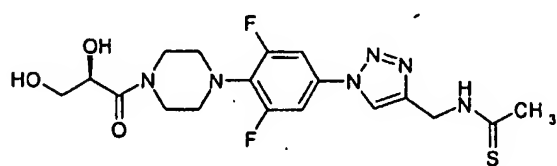
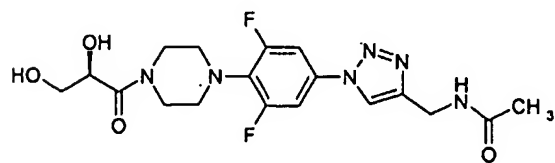
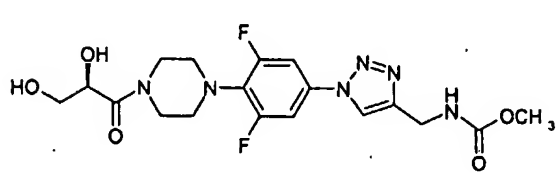
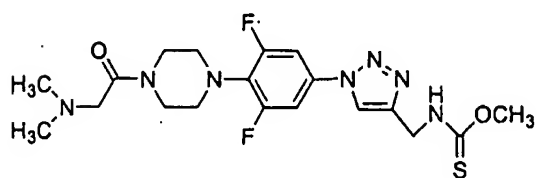
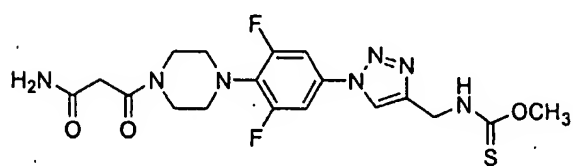
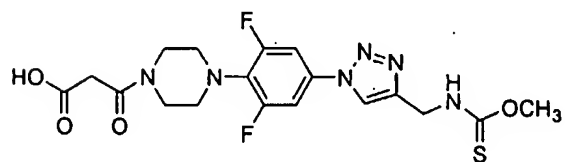
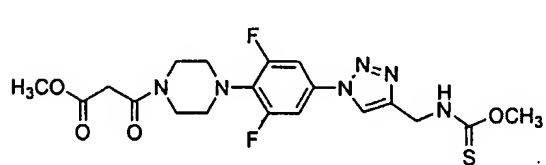
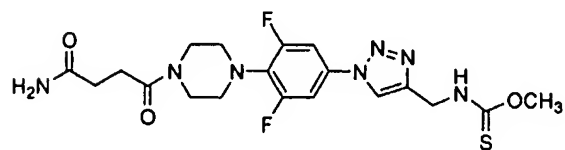
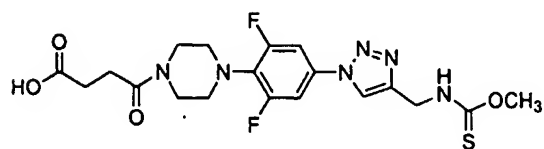
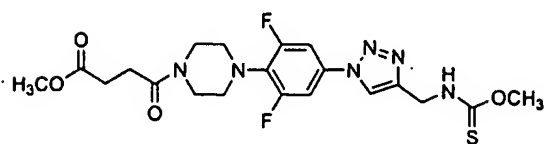
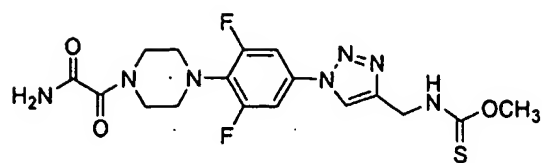
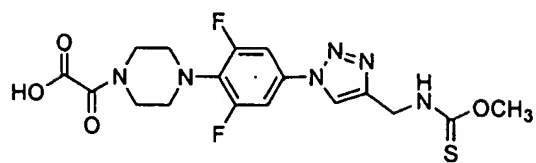


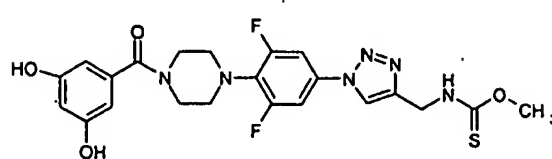
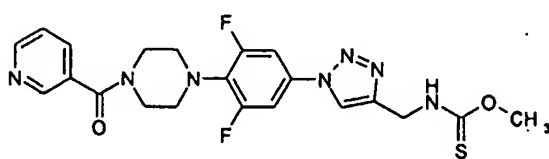
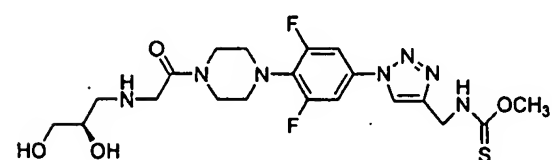
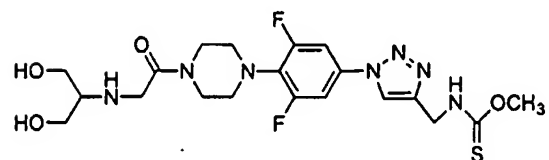
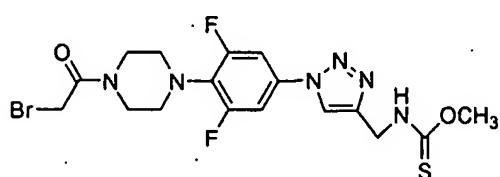
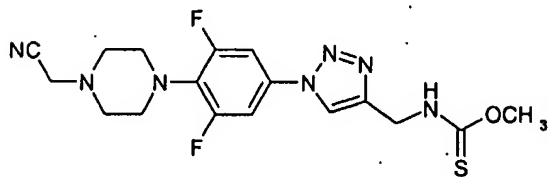
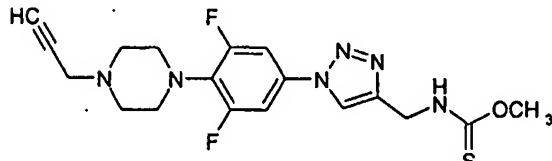
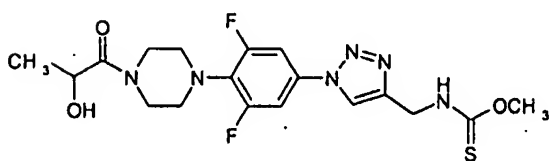
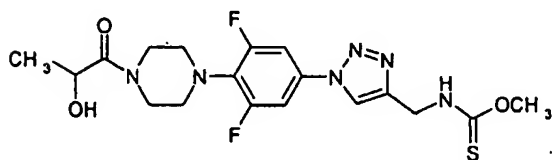
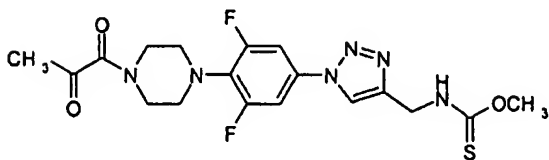
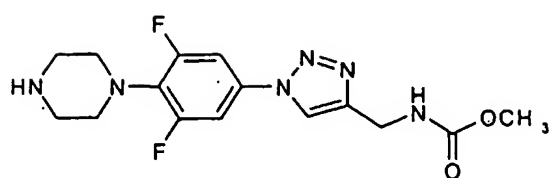
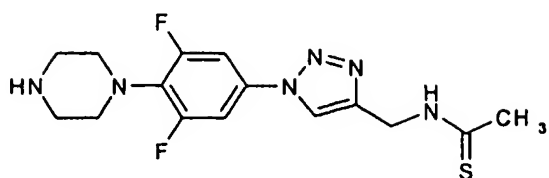


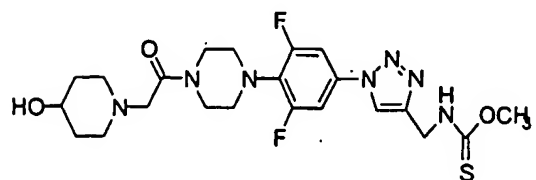
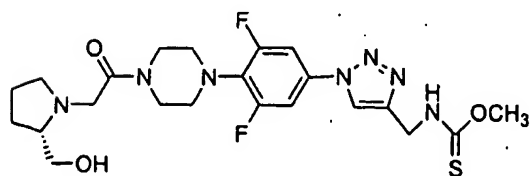
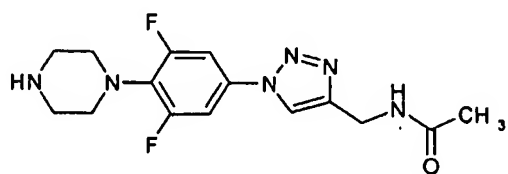
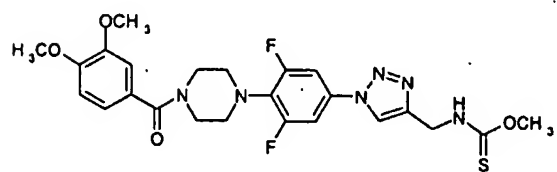
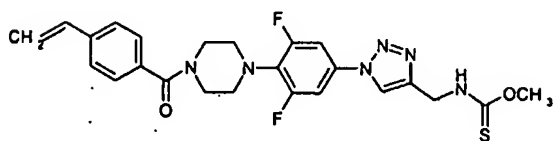
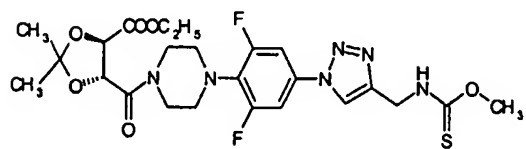
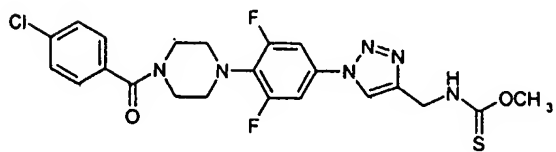
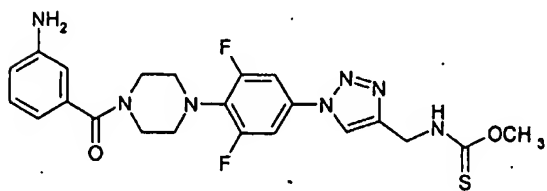
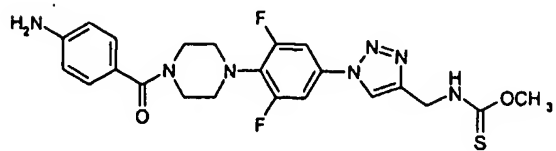
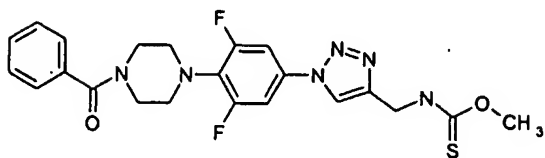
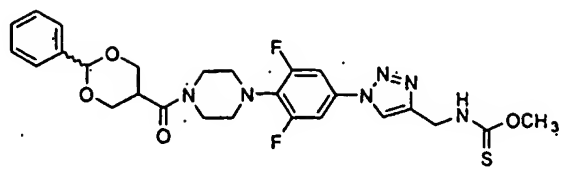
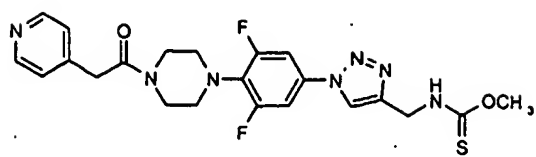


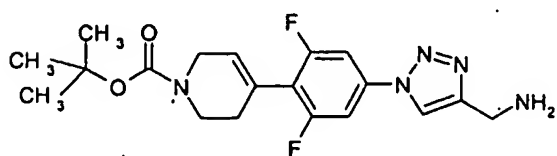
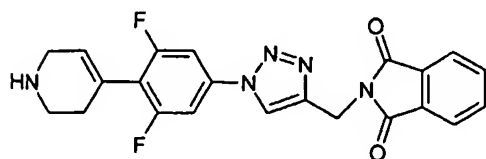
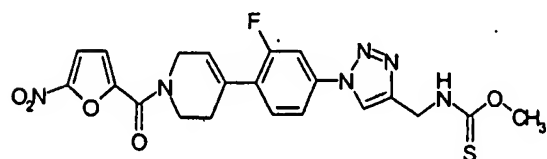
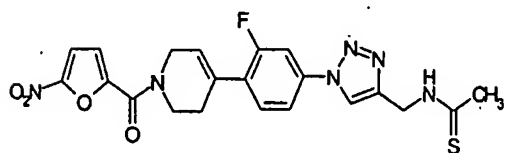
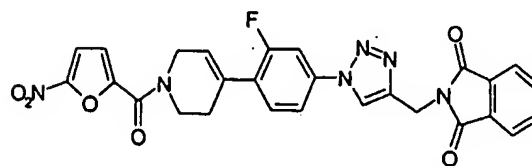
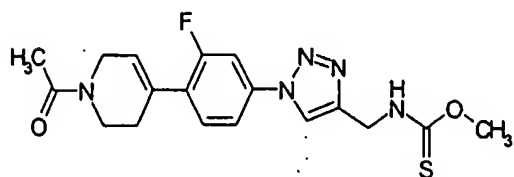
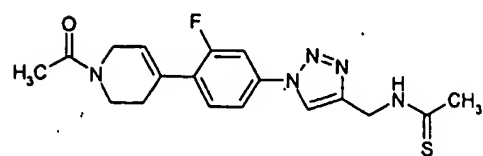
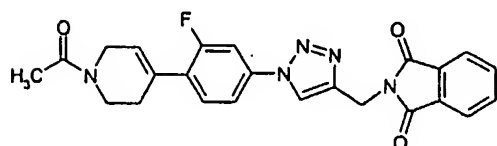
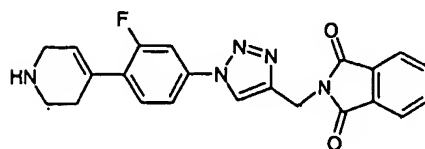
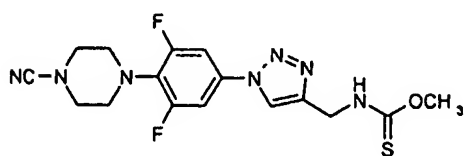
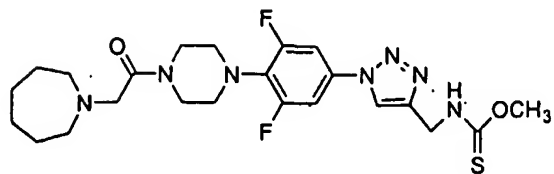
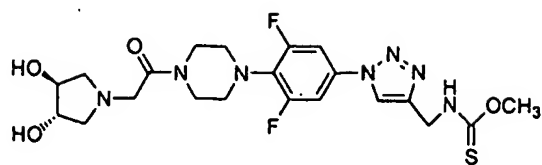


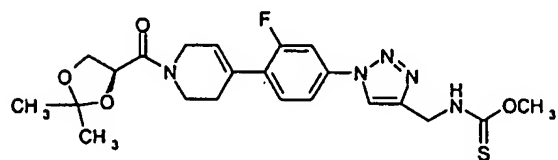


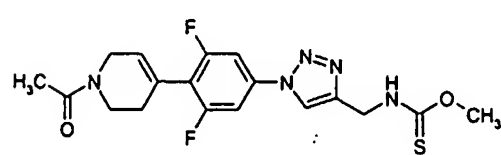
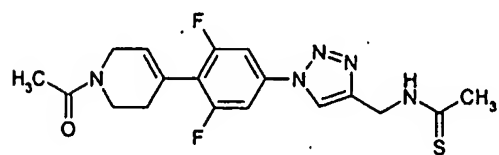
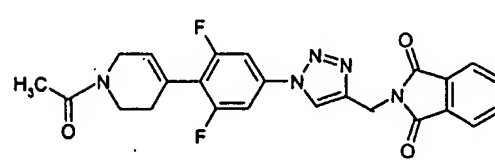
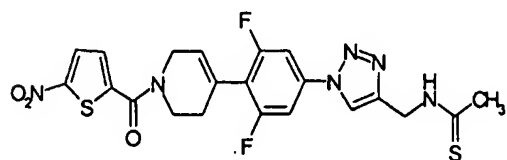
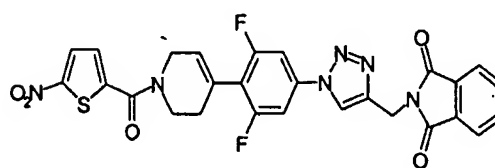
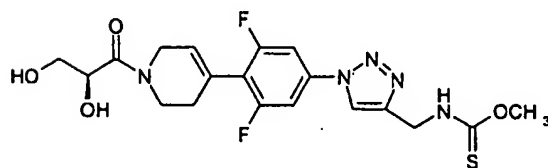
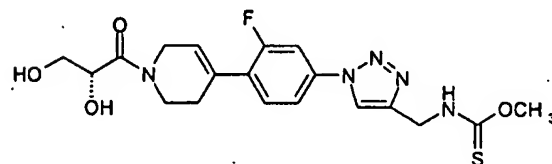
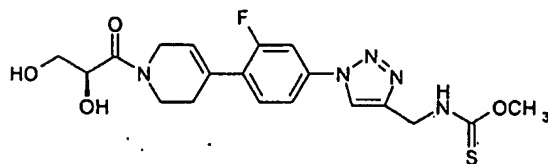
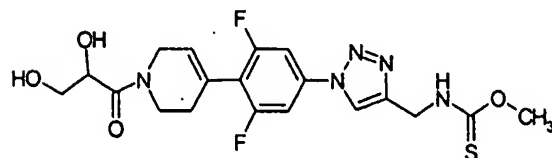
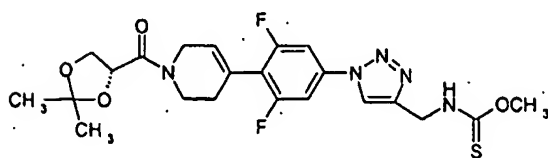
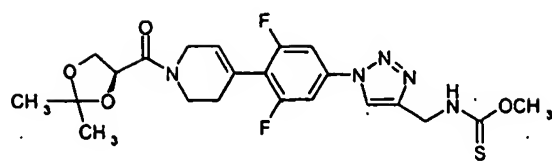
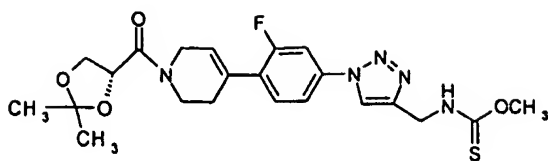


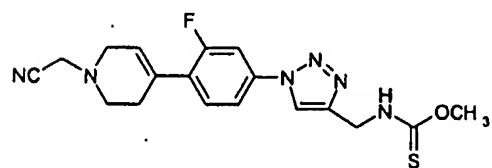
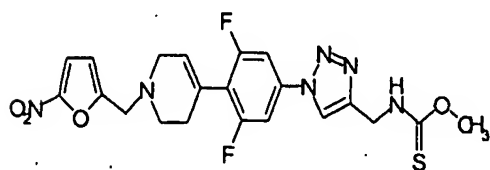
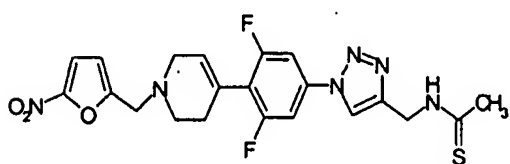
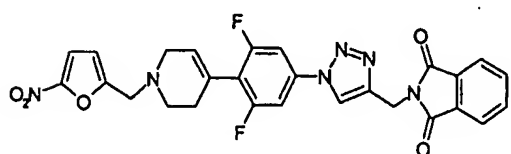
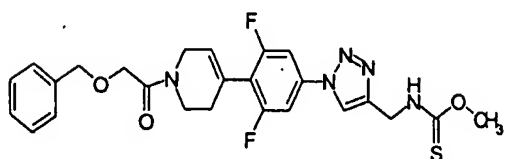
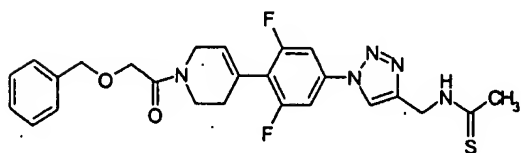
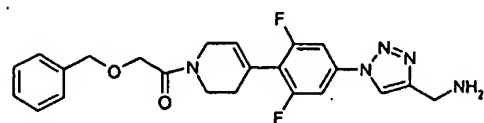
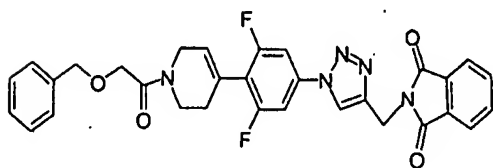
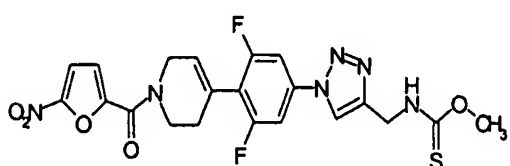
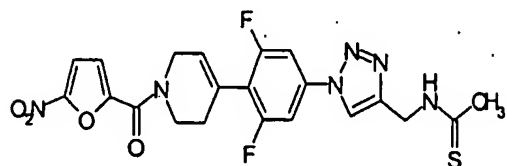
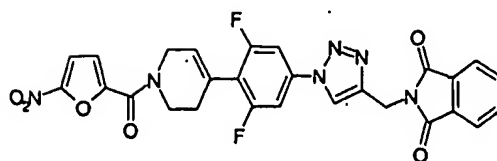
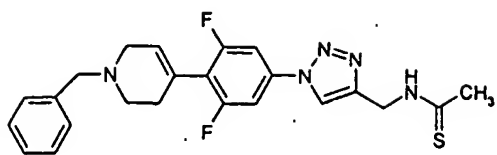


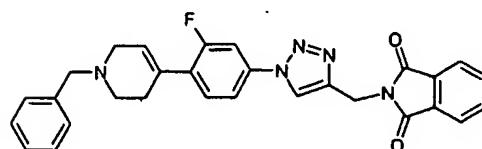
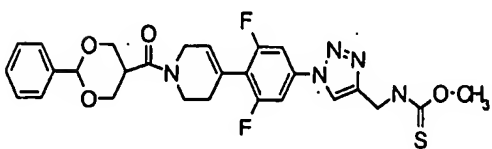
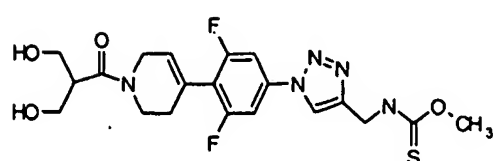
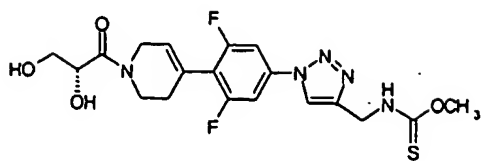






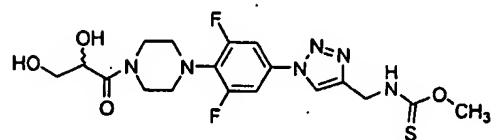
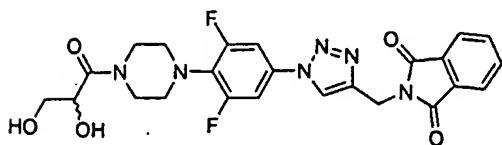
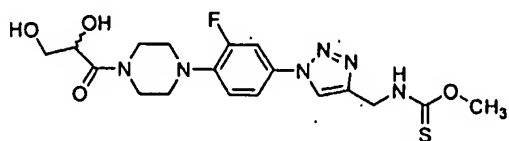
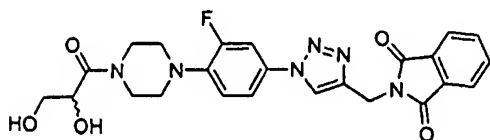
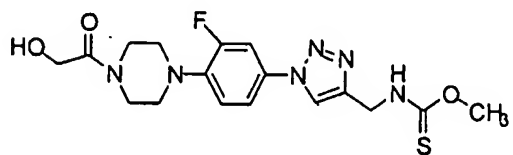
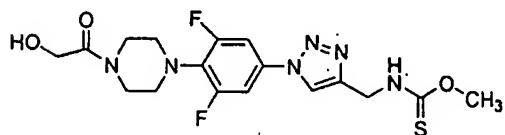


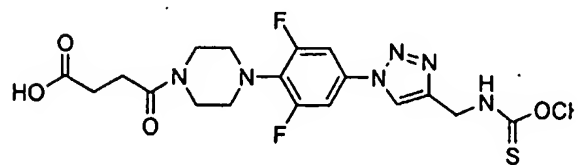
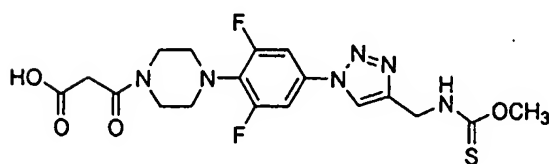
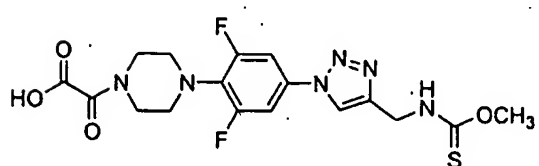
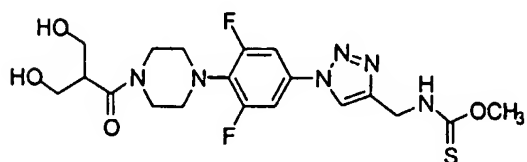
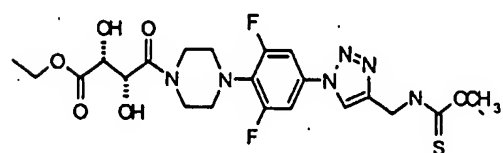
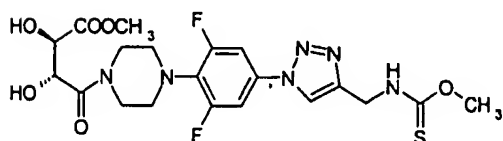
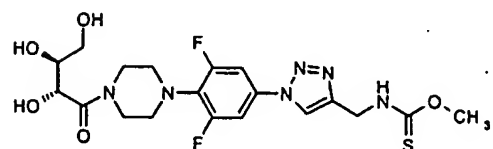
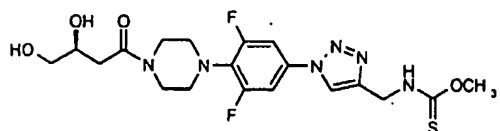
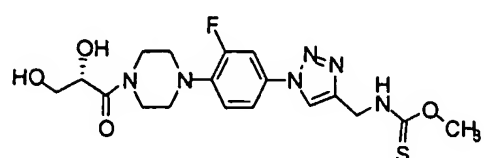
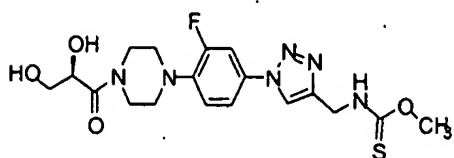
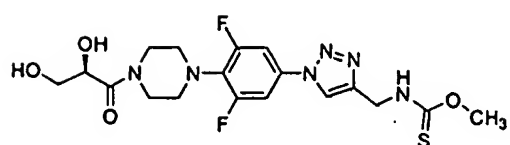
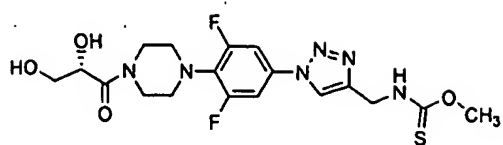


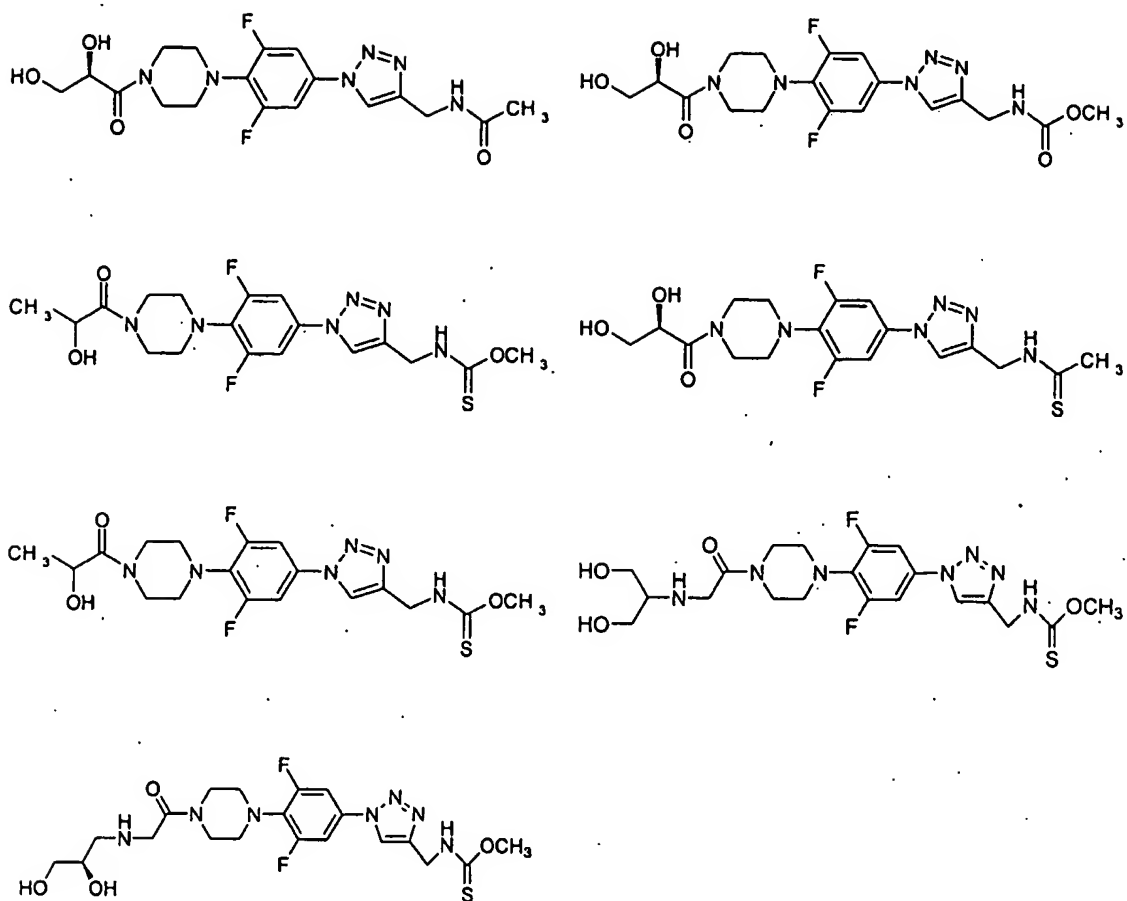


their stereoisomers and their pharmaceutically acceptable salts thereof;

11. The compound as claimed in claim 1 is

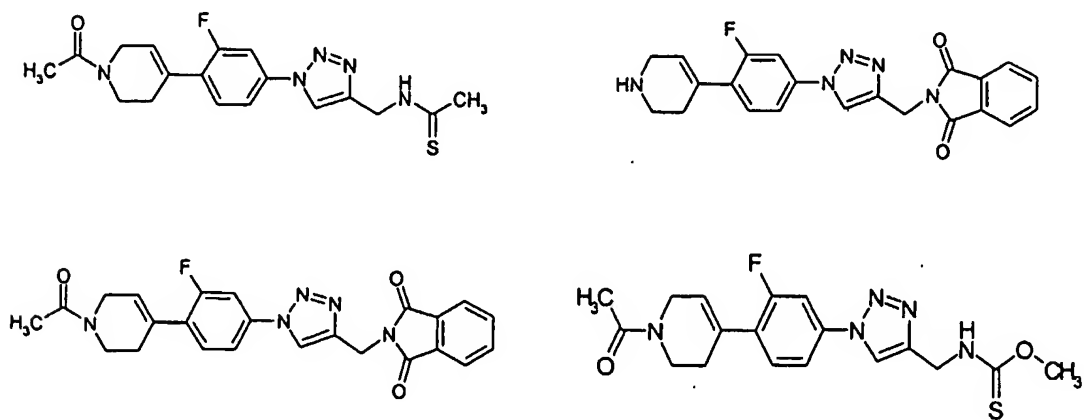


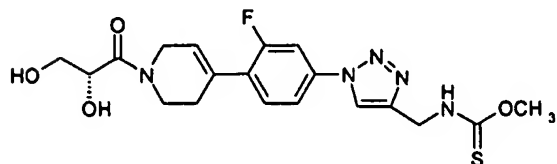
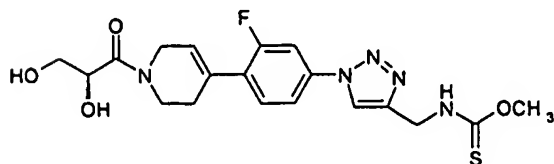
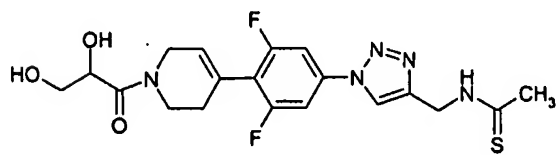
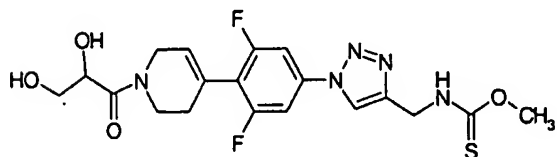
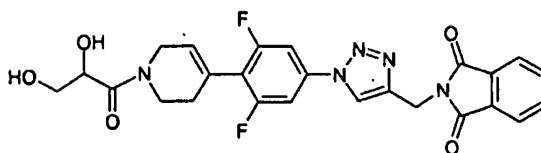
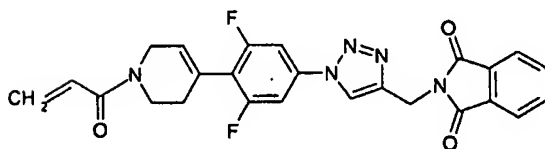
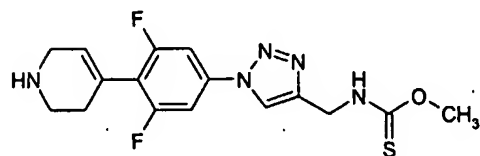
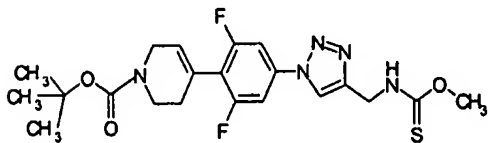
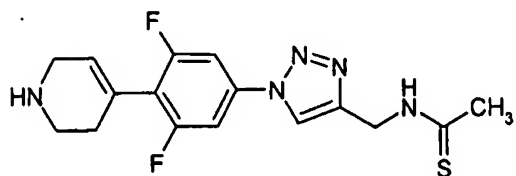
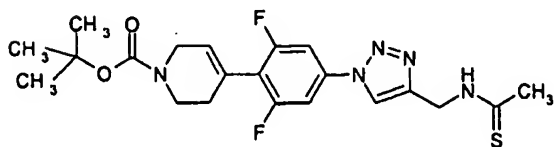
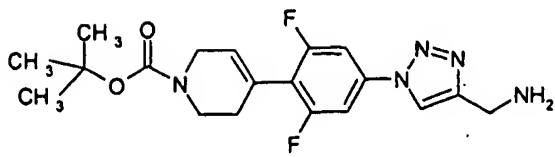
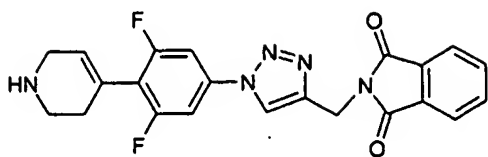


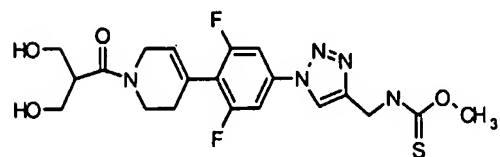
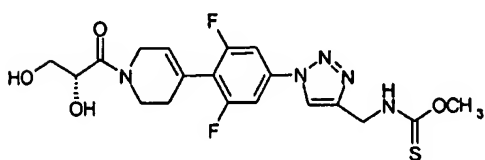
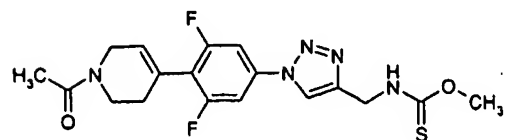
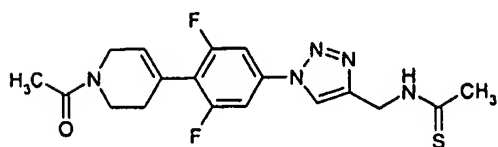
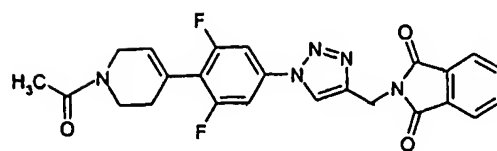
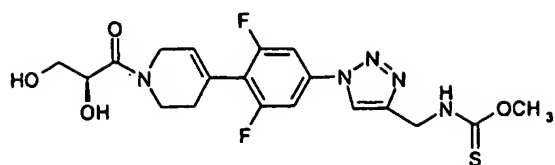


their stereoisomers and their pharmaceutically acceptable salts thereof;

12. The compound as claimed in claim 1 is

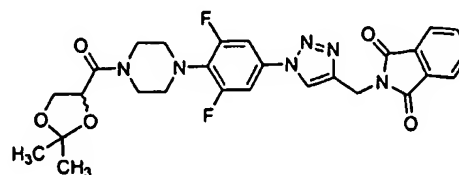
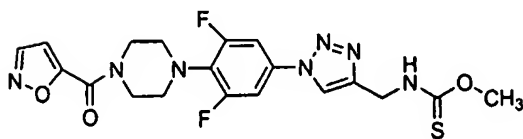
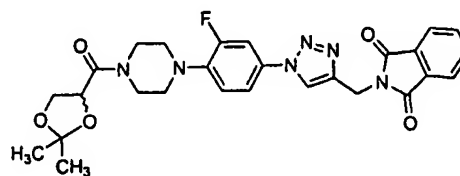
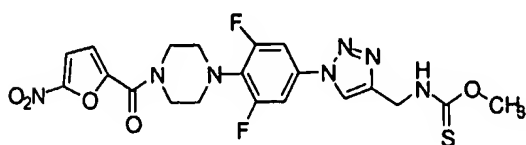
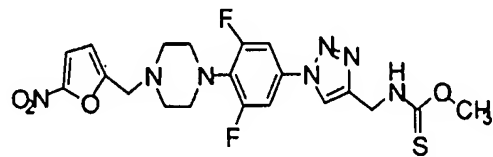
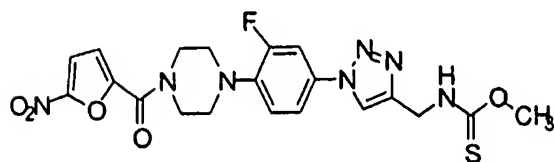


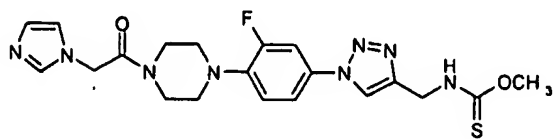
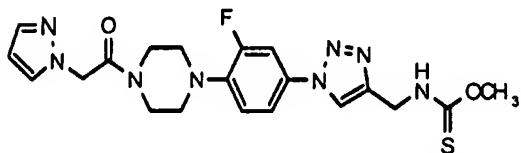
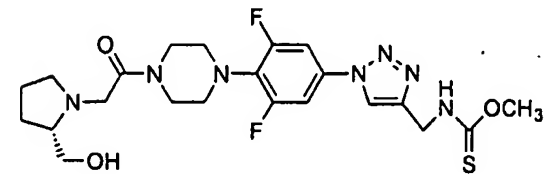
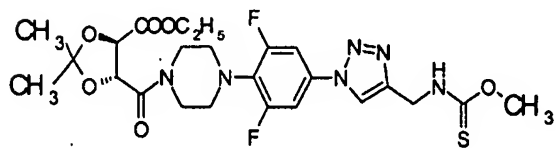
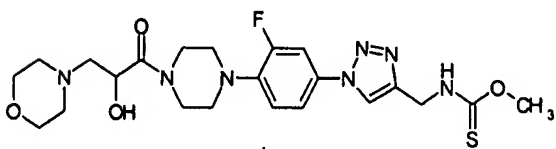
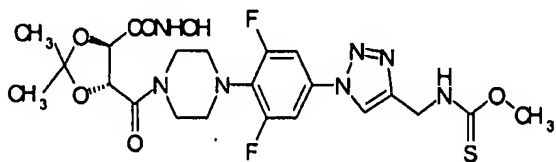
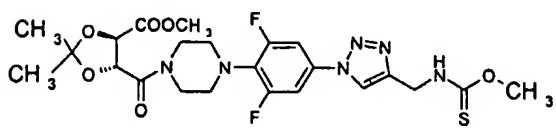
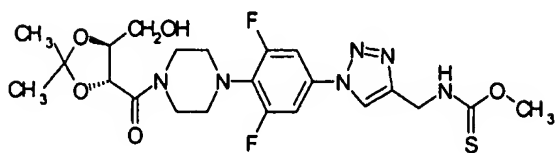
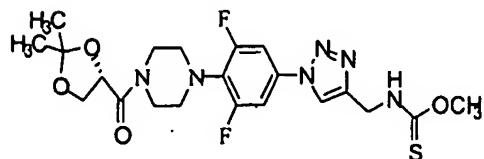
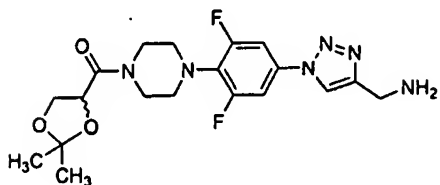
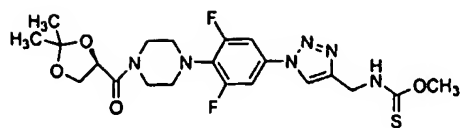
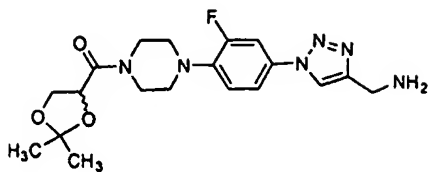


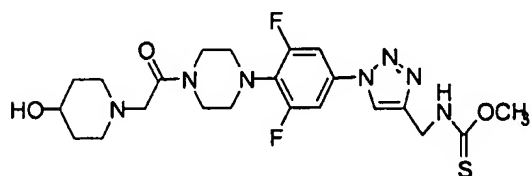
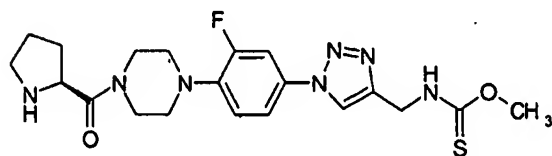
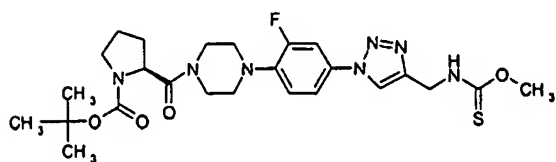
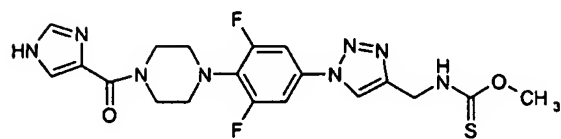
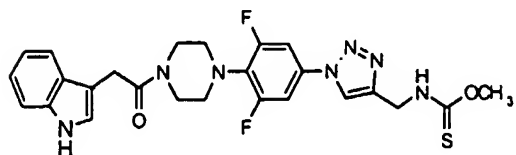
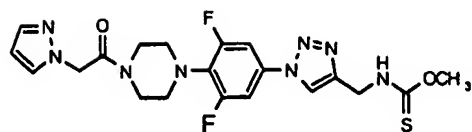
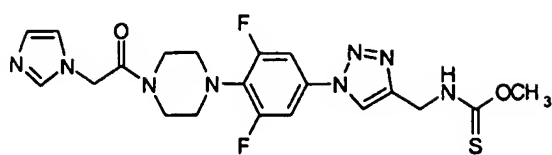


their stereoisomers and their pharmaceutically acceptable salts thereof;

13. The compound as claimed in claim 1 is

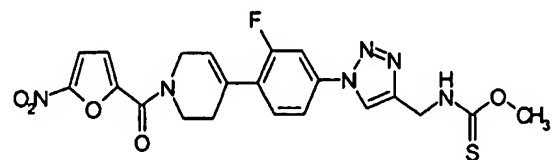
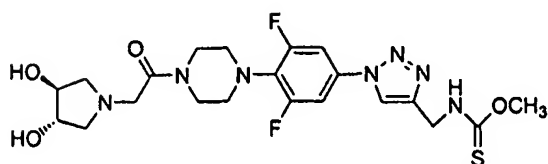
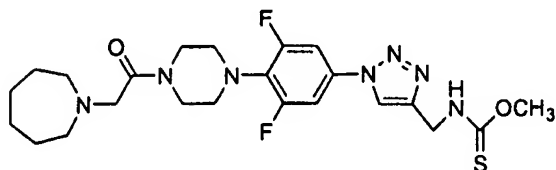
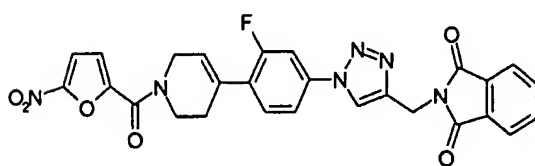


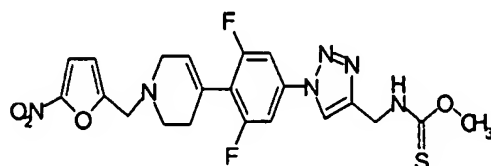
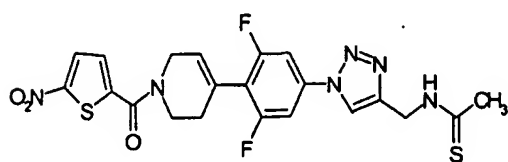
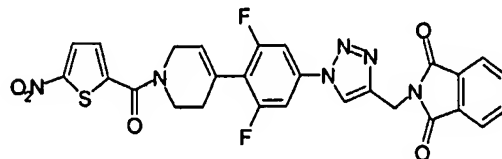
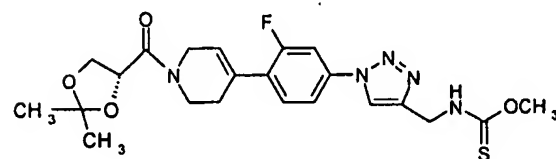
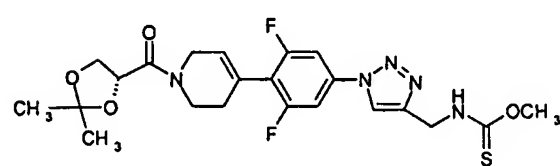
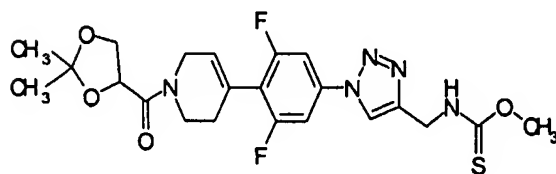
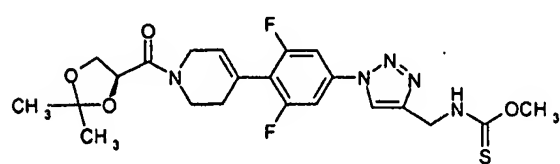
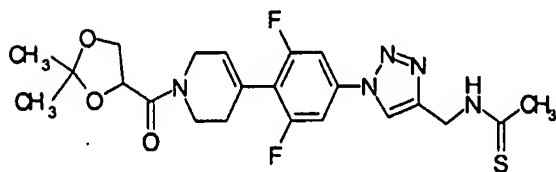
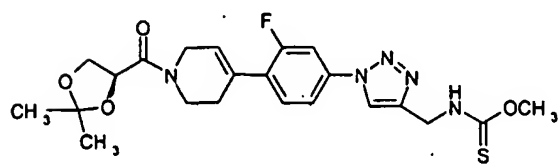
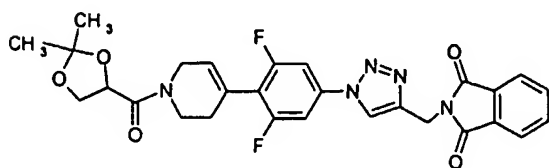
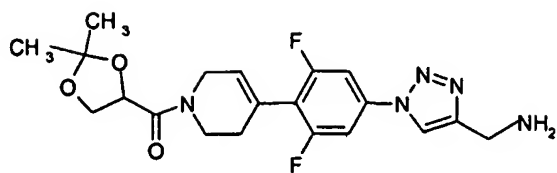
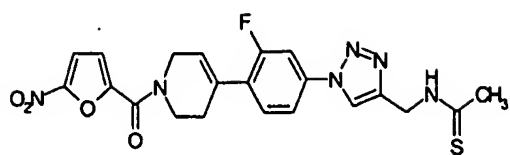


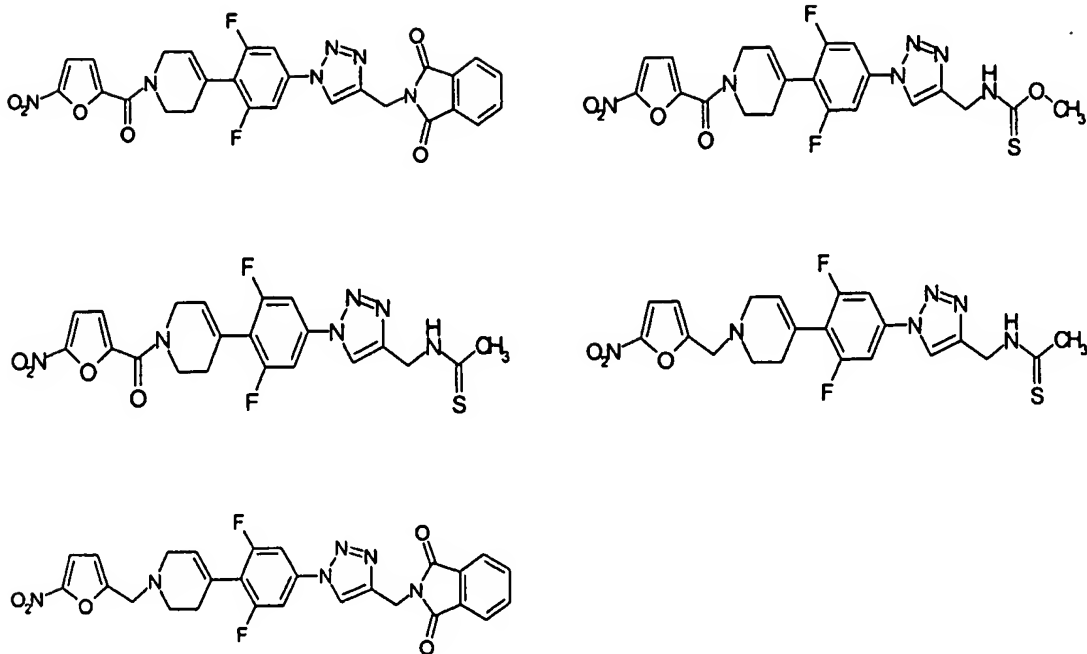


their stereoisomers and their pharmaceutically acceptable salts thereof;

14. The compound as claimed in claim 1 is

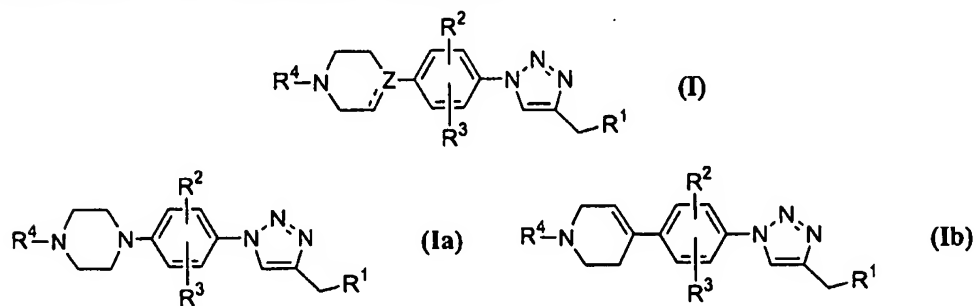






their stereoisomers and their pharmaceutically acceptable salts thereof;

15. A process for the preparation of compound of formula (I), which is represented by compound of formula (Ia) and (Ib) respectively



Where R^1 is isindole-1,3-dione, azido, NHR^5 where R^5 represents

(a) Hydrogen,

(b) $-\overset{\text{O}}{\underset{\text{Q}}{\text{C}}}-R^6$

Where Q represents 'O' or 'S'

R^6 represents

(i) Hydrogen,

Optionally substituted groups selected from,

- (ii) Alkyl,
- (iii) Cycloalkyl,
- (iv) Alkoxy,
- (v) Cycloalkoxy,
- (vi) Alkenyl,
- (vii) Alkenyloxy,
- (viii) Aryl,
- (ix) Aryloxy,
- (xiv) Heteroaryl,
- (xv) Heterocyclyl,
- (xii) Heteroaryloxy,
- (xiii) $-\text{NH}-\text{R}^7$, where R^7 represents hydrogen, optionally substituted groups selected from alkyl, cycloalkyl, hydroxyalkyl, alkoxy, cycloalkoxy, alkenyl, aryl, aralkyl, heteroaryl, heteroaralkyl,

$$\begin{array}{c} -\text{C}-\text{R}^8 \\ \parallel \\ \text{Q} \end{array}$$
 , wherein R^8 is optionally substituted group selected from alkyl, alkoxy, cycloalkyl, alkenyl, alkenyloxy, aryl, aryloxy, aralkyl, aralkoxy, heteroaryl, heteroaryloxy, and Q represents oxygen or sulfur;

- (xiv) $-\text{N}[\text{alkyl}]_2$,
- (xv) $-\text{N}(\text{R}^c\text{R}^d)$, wherein R^c and R^d together form an optionally substituted 5 or 6 member heterocycle ring containing nitrogen and optionally having one or two additional hetero atoms selected from O, S or N;
- (xvi) $-\text{SR}^8$, wherein R^8 is as defined above,
- (xvii) $-\text{SO}_2\text{-alkyl}$;

R^2 and R^3 at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,
- (iii) Cyano,
- (iv) Nitro,
- (v) Amino

Optionally substituted groups selected from

- (vi) Alkyl,
- (vii) Haloalkyl,
- (viii) OR^a where R^a represents hydrogen or optionally substituted alkyl group;

(ix) $-NR^b$ where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl, carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

'Z' represents N, C or CH;

'.....' represents a bond or nobond;

R^4 represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylamino, alkylaminoalkyl, acyl, haloacyl, alkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxyalkyl, alkenyloxy, aryl, aryloxy, arylcarbonyl, aralkyl, aralkylcarbonyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkylcarbonyl, heterocyclylalkyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, alkenylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, aralkoxyalkyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfonyl, alkylsulfanyl, alkylsulfinyl, arylsulfonyl, arylsulfanyl, arylsulfinyl, *tert*-butoxycarbonyl, (BOC), heteroarylsulfonyl

R' and R'' independently represent hydrogen, oxo (=O), thioxo (=S), amino, cyano, halogen, alkyl, alkoxy or haloalkyl;

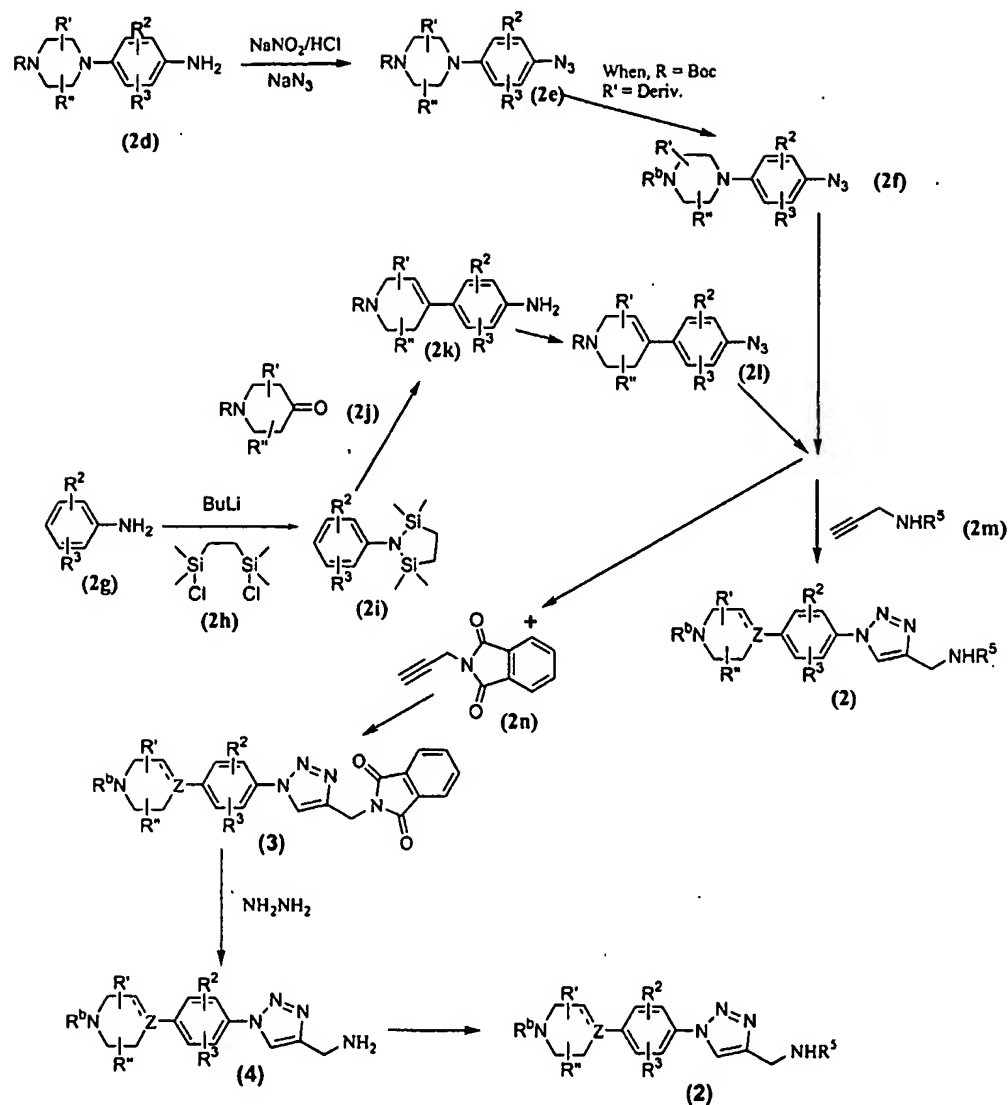
Substituents on R^4 , R^6 , R^7 , R^8 , independently selected from halogen, nitro, cyano, amino, hydroxy, cyano, oxo (=O), thioxo (=S), =N-CN, =N-OR^x, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (*tert*-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSO), *tert*-butoxycarbonyl (BOC), N-hydroxyformamide, carboxylic acids or its derivatives, phosphoric acid or its derivatives. Further optional substituents on the optionally substituted groups defined above are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), thioxo (=S), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives.

Substituents on R^2 and R^3 independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, =O, =S, cyano group, or carboxylic acid or its derivatives.

their pharmaceutically acceptable salts their stereoisomers thereof, pharmaceutical compositions containing them.

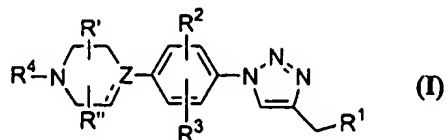
Wherever substitutions are possible on the groups represented by R^2 , R^3 , R^4 , R^5 , R^6 , R^7 and R^8 , they may take place 1 to 5 times, which may be same or different;

which comprises:



Where R^b represents R or R^4 , wherein R represents 't-butoxy carbonyl group (protecting group) and R^4 is as defined above.

16. A pharmaceutical composition comprising (a) an antibacterially effective amount of the compound of formula (I) as claimed in claim 1 and (b) a pharmaceutically acceptable carrier, diluent, excipient or solvate.

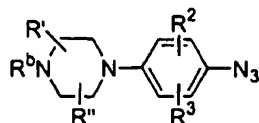


17. The pharmaceutical composition of claim 16, which is a tablet, a capsule, a powder, a syrup, a solution or a suspension.

18. A method for inhibiting the growth of bacteria in humans and non-human mammals suffering bacterial infections, which comprises administering to a subject suffering such infection an antibacterially effective dose of the compound of claim 1.

19. The method according to claim 1, wherein the bacterial infection is caused by the drug susceptible or resistance bacterial pathogens.

20. A compound of formula (2f)



(2f)

where R^b represents R or R⁴; where in R represents *tert*-butoxy carbonyl (BOC)

R⁴ represents hydrogen, cyano, alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, hydroxyalkyl, aminoalkyl, alkylamino, alkylaminoalkyl, acyl, haloacyl, alkylcarbonyl, alkoxycarbonyl, hydroxyalkylcarbonyl, alkoxylalkyl, alkenyloxy, aryl, aryloxy, arylcarbonyl, aralkyl, aralkylcarbonyl, heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl, heteroaralkylcarbonyl, heterocyclylalkyl, heteroaryloxy, cycloalkoxy, heteroarylcarbonyl, heterocyclylcarbonyl, alkenylcarbonyl, aralkyl, aralkylcarbonyl, aralkoxyalkylcarbonyl, aralkoxyalkyl, aralkoxyalkylcarbonyl, alkenylcarbonyl, alkylsulfonyl, alkylsulfanyl, alkylsulfinyl, arylsulfonyl, arylsulfanyl, arylsulfinyl, *tert*-butoxycarbonyl, (BOC), heteroarylsulfonyl

R² and R³ at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,
- (iii) Cyano,
- (iv) Nitro,
- (v) Amino

Optionally substituted groups selected from

- (vi) Alkyl,
- (vii) Haloalkyl,
- (viii) OR^a where R^a represents hydrogen or optionally substituted alkyl group;
- (ix) -NR^b where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxylalkyl,

carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

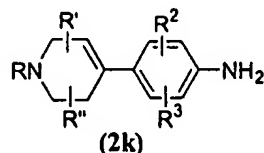
R' and R'' independently represent hydrogen, oxo (=O), thioxo (=S), amino, cyano, halogen, alkyl, alkoxy or haloalkyl;

Substituents on R⁴ independently selected from halogen, nitro, cyano, amino, hydroxy, cyano, oxo (=O), thioxo (=S), =N-CN, =N-OR^x, where R^x represents hydrogen, alkyl or aryl; optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, alkenyl, haloalkyl, hydroxyalkyl, hydroxyalkylamino, hydroxyalkyl, alkylamino, aminoalkyl, alkylaminoalkyl, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylsulfonyl, alkylsulfinyl, alkylsulfanyl, acyl, aryl, aralkyl, aralkoxy, heteroaryl, (*tert*-butyl-dimethyl-silanyloxy)-acetyl chloride (TBDMSO), *tert*-butoxycarbonyl (BOC), N-hydroxyformamide, carboxylic acids or its derivatives, phosphoric acid or its derivatives. Further optional substituents on the optionally substituted groups defined above are selected from halogen, hydroxyl, cyano, amino, nitro, oxo (=O), thioxo (=S), hydroxyalkyl, alkylamino, aminoalkyl, carboxylic acid or its derivatives.

Substituents on R² and R³ independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, =O, =S, cyano group, or carboxylic acid or its derivatives.

Wherever substitutions are possible on the groups represented by R², R³ and R⁴, they may take place 1 to 5 times, which may be same or different.

21. A compound of formula (2k)



where R represents *tert*-butoxy carbonyl (BOC)

R² and R³ at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,
- (iii) Cyano,
- (iv) Nitro,
- (v) Amino

Optionally substituted groups selected from

- (vi) Alkyl,
- (vii) Haloalkyl,

(viii) OR^a where R^a represents hydrogen or optionally substituted alkyl group;

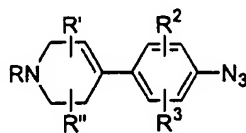
(ix) $-NR^b$ where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl, carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

R' and R'' independently represent hydrogen, oxo ($=O$), thioxo ($=S$), amino, cyano, halogen, alkyl, alkoxy or haloalkyl;

Substituents on R^2 and R^3 independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, $=O$, $=S$, cyano group, or carboxylic acid or its derivatives.

Wherever substitutions are possible on the groups represented by R^2 and R^3 they may take place 1 to 5 times, which may be same or different.

22. A compound of formula (21)



(21)

where R represents *tert*-butoxy carbonyl (BOC)

R^2 and R^3 at each occurrence are the same or different and are

- (i) Hydrogen,
- (ii) Halogen,
- (iii) Cyano,
- (iv) Nitro,
- (v) Amino

Optionally substituted groups selected from

- (vi) Alkyl,
- (vii) Haloalkyl,

(viii) OR^a where R^a represents hydrogen or optionally substituted alkyl group;

(ix) $-NR^b$ where R^b represents hydrogen or optionally substituted alkyl, alkenyl, cycloalkyl, alkoxy, hydroxyalkyl, alkyl carbonyl, alkoxycarbonyl, alkoxyalkyl, carboxyalkyl, alkylsulfonyl, alkylcarbonylaminoalkyl, arylcarbonylaminoalkyl, alkylcarbonyloxyalkyl, amino alkyl, alkylamino, aryl amino;

R' and R'' independently represent hydrogen, oxo ($=O$), thioxo ($=S$), amino, cyano, halogen, alkyl, alkoxy or haloalkyl;

Substitutents on R² and R³ independently selected from hydroxy, halogen, nitro, amino, alkyl, haloalkyl, alkoxy, =O, =S, cyano group, or carboxylic acid or its derivatives.

Wherever substitutions are possible on the groups represented by R² and R³ they may take place 1 to 5 times, which may be same or different.

23. The compound of claim 1, which is (1-{4-[4-(2(S),3-Dihydroxy-propionyl)-piperazin-1-yl]-3,5-difluoro-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

24. The compound of claim 1, (1-{3,5-Difluoro-4-[4-(2(R),3(S),4-trihydroxy-butyryl)-piperazin-1-yl]-phenyl}-1H [1,2,3]triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

25. The compound of claim 1, which is (1-{4-[1-(2,3-Dihydroxy-propionyl)-1,2,3,6-tetrahydro-pyridin-4-yl]-3,5-difluoro-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

26. The compound of claim 1, which is {1-[4-(4-Aminooxalyl)-piperazin-1-yl]-3,4-difluoro-phenyl}-1H-[1,2,3]triazol-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

27. The compound of claim 1, which is (1-{4-[4-(2(R),3-Dihydroxy-propionyl)-piperazin-1-yl]-3,5-difluoro-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

28. The compound of claim 1, which is (1-{3,5-Difluoro-4-[4-(3-hydroxymethyl-propionyl)-piperazin-1-yl]-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

29. The compound of claim 1, which is (1-{4-[1-(2(S), 3-Dihydroxy-propionyl)-1, 2, 3, 6-tetrahydro-pyridin-4-yl]-3,5-difluoro-phenyl}-1H-[1,2,3] triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

30. The compound of claim 1, which is (1-{4-[1-(2(R), 3-Dihydroxy-propionyl)-1, 2, 3, 6-tetrahydro-pyridin-4-yl]-3,5-difluoro-phenyl}-1H-[1, 2, 3] triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

31. The compound of claim 1, which is (1-{4-[4-(3(S),4-Dihydroxy-butyryl)-piperazin-1-yl]-3,5-difluoro-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of

32. The compound of claim 1, which is (1-{3,5-Difluoro-4-[1-(3-hydroxy-2-hydroxymethyl-propionyl)-1,2,3,6-tetrahydro-pyridin-4-yl]-phenyl}-1H-[1,2,3]triazol-4-ylmethyl)-thiocarbamic acid *O*-methyl ester or a salt there of